AN ETHNOGRAPHIC STUDY OF INTERPROFESSIONAL COLLABORATION IN A PAEDIATRIC SETTING: INSIGHTS THROUGH THE LENS OF SCRIPTEDNESS

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DECLARATION

I, **Anne Cini**, confirm that the research included within this thesis is my own work and that where it has been carried out in collaboration with, or supported by others, that has been duly acknowledged and my contribution indicated.

Previously published material is also acknowledged below.

I attest that I have exercised reasonable care to ensure that the work is original, and does not, to the best of my knowledge, break any UK law, infringe any third party's copyright or other Intellectual Property Right, or contain any confidential material.

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ABSTRACT

Interprofessional collaboration (IPC) is when professionals from health and social care work together to provide a service for the patient or solve problems. Literature shows that although IPC is widely advocated, it is not always easy to achieve. IPC in the adult patient setting has been widely researched and despite the challenges, evidence shows several benefits. However, there is little IPC literature in hospitalised children's settings. In view of this gap, the purpose of this study was to examine how healthcare providers enacted IPC in a paediatric setting. Goffman's (1959) script theory and the different categories of scriptedness, guided the analytical process and gave structure and depth to the emerging findings, helping to see aspects of IPC that would otherwise remain invisible.

This ethnography took place in a paediatric setting comprising of four wards namely; two medical, one surgical, and one oncology unit in one large hospital. Data collection and analysis were done iteratively and followed by time focusing exclusively on analysis and findings. The data corpus was generated through 114 hours of observation from 38 sessions, generating extensive field notes; 14 semi-structured formal interviews with professionals coming from seven different professions, and several informal interviews during observations.

IPC was commonly observed during the weakly scripted encounters, mainly the unscheduled day-to-day interactions, not only because they were frequently observed, but also because the nature of these encounters was more conducive to IPC. Scriptedness also revealed that different professions contribute to the ward round IPC but not necessarily at the bedside. This became visible when the ward round was classified in five stages, guided by a multi-level metascript.

Findings have added to the knowledge on IPC in paediatrics by highlighting how weak scripts guide the unscheduled encounters, and having a metascript guide the different stages of the ward round. This study has shown that the lens of scriptedness helps individuals discover how IPC is achieved during different encounters.

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ACRONYMS

AWAS:	Association for the Welfare of Asylum Seekers
CPAS:	Clinical patient administration system
CPR:	Cardio-pulmonary resuscitation
HCP:	Healthcare provider
IPC:	Interprofessional collaboration
MDT:	Multidisciplinary team
NAS:	Neonatal abstinence syndrome
NS:	Nursing station
PACS:	Picture archiving and communication system
PIVA:	Peripheral intravenous access

GLOSSARY

(The words in text are referred to this page the first time they are mentioned)

Audience: In this thesis, the term 'audience' refers to those participants who were present during an encounter and who were either onlookers or members who occasionally participated in the interaction. Therefore, members of an audience may range from patients, families, and visitors, to other healthcare professionals or other healthcare providers visiting the ward temporarily e.g. maintenance persons, delivery persons and hospital management personnel. In some rare events, members of families or visitors were healthcare providers themselves. Professionals who regularly work on the wards which were observed, are considered to be part of the group and not part of the audience.

Cannula: A devise made up of a metal and plastic tube through which blood may be withdrawn or medication or intravenous fluids may be administered.

Central venous line: This is a device inserted into the superior vena cava or right atrium.

Codes: Descriptive words that act as labels for key concepts (Balmer *et al*, 2010).

Consultant: A senior medical or surgical specialist and hospital appointee, who is formally recognised as an expert in the field. Consultants accept ultimate responsibility for the care of patients referred to them, so it is a position of considerable responsibility.

Collaboration was defined as "activities in which staff with different professional training came together to discuss or deliver care or related tasks" (Reeves & Lewin, 2004, p. 219).

Fieldwork is the term used in qualitative research to cover the data collection phase when the investigators leave their desks and go out 'into the field.' 'The field' is metaphorical: it is not a real field, but a setting or a population (Delamont, 2004).

Firm: A group made up of the consultant together with the appointed doctors of different grades, senior and junior.

Flagyl: Its generic name is Metronidazole and it is an antibiotic used to treat a wide variety of infections.

Hickman line: A central venous line with more than one port entry which are colour-coded, inserted surgically, usually used to administer treatment, such as chemotherapy or to withdraw blood for analysis.

Intraprofessional: is a term that describes the activity and work which is done by individuals within the same profession.

iSoft: This is a laboratory information system provided by iSoft via which clinical staff can track orders, samples and results from microbiology, pathology, biochemistry and transfusion services. Some of its functionality include tracking blood samples - if processed or not; pre-defined range limits are incorporated - flags and colour codes abnormal results; tracks if result has been reviewed by clinical expertise (usually doctors); order laboratory tests; and build patient profile (lab results related).

Lumbar puncture: This is an invasive procedure where a special hollow needle is inserted in the spine at the lumbar region, and cerebro-spinal fluid is drawn out for diagnostic purposes.

Participant in 'participant observation' does not mean doing what those being observed do, but interacting with them while they do it. It is important to participate enough to be able to write feelingly about the nature of the work (Delamont, 2004).

Port-a-cath is a central venous access devise, left entirely under the skin, with a port for access and a catheter connecting the port to a vein.

RSV: Respiratory syncytial virus is a respiratory virus common in children and detected by obtaining a swab from nasopharengeal aspirate.

Voltaren: Generic name is Diclofenac. This is a nonsteroidal anti-inflammatory drug to reduce inflammation and also used as analgesia.

Ward round: In this context, the ward round (occasionally referred to as the consultant round) refers to the practice in which the consultant, usually accompanied by other doctors, the nursing officer in charge of the ward, and maybe other professionals, approaches each patient on the ward to assess patient progress and discuss and direct changes in treatment modalities.

Ward-round-book: This book is in the form of a diary and the kind of information written in it, hand written, is updated daily (See Appendix 19). Information includes the names of the patients, diagnoses, which firm they belong to and any new treatment or change in care plan.

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Chapter 1 Introduction

1.1 Introduction

The origins of this study can be traced back to 1996 when, as a nursing academic mentoring students, I had the opportunity to observe different healthcare professions in different wards (adult and paediatric) while they conducted their everyday work. I observed how some professionals were better than others at interacting and collaborating and I became curious about the elements that hindered or facilitated this phenomenon.

My first opportunity to study collaboration (See glossary) was for my Master's thesis where I explored collaboration among nurses, physicians and parents of hospitalised children on one paediatric ward (Cini, 2007). The choice of the paediatric setting arose from my previous clinical background, working in paediatrics. One of the recommendations emerging from that thesis was to further explore collaboration in the wider paediatric setting and to include all the professions involved in children's care; hence the focus of this thesis. While conducting my Master's study, I identified a lack of literature on interprofessional collaboration (IPC) where children were hospitalised, which was later confirmed by the scoping review for this doctoral study (Section 2.2.1). Building upon my earlier study and beginning to address the wider gap in the IPC literature, this study examined how IPC was enacted in the context of four paediatric in-patient wards within one large hospital. It echoed my earlier work and many published IPC studies in a range of care settings (See Sections 2.5 and 2.8) by adopting an ethnographic approach to data collection. However, it is unique in using the theoretical lens of scripts (Goffman, 1959) to gain analytic depth in relation to IPC.

1.2 A brief introduction to interprofessional collaboration

Nowadays, healthcare is delivered by multiprofessional teams as no one profession can provide all the expertise that the patient might need during the journey of ill health (Bronstein, 2002; Cooley, 1994; Steihaug, Johannessen, Ådnanes, Paulsen, & Mannion, 2016). Therefore, it is axiomatic that all professions should work together and collaborate to care holistically for the patient (D'Amour, Ferrada-Videla, Rodriguez, &

Beaulieu, 2005; Freeth, 2001; Remke & Schermer, 2012). This is known as interprofessional collaboration (IPC). Indeed, being professional entails being interprofessional (Hammick, Freeth, Copperman, & Goodsman, 2009). Furthermore, the patient or any other service user has more to gain when practice is interprofessional than when it is not (Morrison & Glenny, 2012).

Several authors, international documents, governments, policy makers and professional bodies have given their definitions of IPC. These include: the Canadian Interprofessional Health Collaborative (CIHC) (2010); Graham and Barter (1999); Gray (1989); Hammick, Freeth, Copperman and Goodsman (2009); Interprofessional Care Steering Committee (2007); Way, Jones, and Busing (2000); and the World Health Organisation (WHO) (2010; 2013).

One definition that is simple yet comprehensive in its description is the following by Reeves, Lewin, Espin and Zwarenstein (2010, p. xiii),

> **"Interprofessional collaboration is a type of interprofessional work, which involves different health and social care professions who regularly come together to solve problems or provide services."**

This definition is very similar to others by Barr, Koppel, Reeves, Hammick and Freeth (2005) and Hammick *et al*., (2009). Sometimes the definition of IPC also includes the participation of patients and their families (Hammick *et al*., 2009; Oandasan *et al*., 2004). However, in this study, the focus will mainly be IPC among the professionals.

Collaborating and working together may take different forms and many researchers have discussed this. Working together and not just alongside each other is a feature of IPC (Meads & Ashcroft, 2005). It is more than just sharing a common goal but actually working together towards achieving this goal. Thus, a more elaborate definition by Graham and Barter (1999) affirms that apart from being a process of working together to build consensus on common goals, approaches and outcomes; collaboration requires an understanding of each other's roles, mutual respect among participants (See glossary), shared decision-making, and accountability for both the goals and team members.

Furthermore, terms such as advocacy, consensus building, cooperating, coordinating, networking, working jointly, sharing knowledge and partnership building, may all fall under the umbrella term of 'collaboration' (Graham & Barter, 1999; Perreault & Careau, 2012; Merrick Zwarenstein & Bryant, 2000). Additionally, multiple interactions over time and a supportive organisation are key attributes of a culture conducive to IPC (Légaré *et al.,* 2011).

While 'coordination' is the provision of services by different professions in a separate but coordinated manner not necessitating any contact, cooperation involves more contact between professions although still maintaining their autonomy (Davoli & Fine, 2004; Hammick et al., 2009). However, Øvretveit (1997) asserts that interprofessional working is the interwoven working together of different professions. This requires that each profession respects and acknowledges each other's expertise and that common core skills are merged so that the group becomes an integrated whole. The concept of common core skills is contentious. IPC will be explored further in the coming chapters.

Thus, the definition of IPC for this study will be similar to those quoted in this section, and includes that professionals from health and social care work together to jointly provide and plan care, solve problems and render a service to patients.

1.3 Aims and objectives of the study

The main aim of this study is to explore and interpret, through ethnography (See Section 3.5), how interprofessional collaboration is enacted in a Maltese paediatric setting comprising four in-patient wards. Thus, the research question for this study is as follows: ***How is IPC enacted by professionals working with hospitalised children and their families?***

Goffman's (1959) social dramaturgical theory (See Section 3.4), especially focusing on the theoretical lens of scripts, was used to pursue the following objectives:

- To understand the constituent acts of information exchange used to enact IPC;
- To explore the enactment of synchronous and asynchronous IPC during different encounters;
- To determine the categories of scripts that are invoked during IPC;
- To explore the relationship between scriptedness and IPC.

1.4 The need for the study

Research suggests that IPC has the potential to provide effective and comprehensive care (Scott Reeves, Pelone, Harrison, Goldman, & Zwarenstein, 2017). However, research into IPC reveals many complexities for the different professionals in health and social care that need to work together, especially in the area of communication and patient safety (Abramson & Mizrahi, 2003; Alvarez & Coiera, 2006; Lillebo & Faxvaag, 2015; Reeves *et al*., 2017). The lens of scriptedness has been used in this study to provide insight into the complexities of interaction during IPC. In addition, there have been few studies of IPC in paediatric inpatients settings (See Section 2.7), so this study will contribute to fill that gap. More generally, published studies of IPC in adult healthcare settings have shown that ethnography is a fruitful way to study IPC which creates new insights and, furthermore, is a research approach which healthcare providers (HCPs) and patients find acceptable (Allen, 1997; Lewin & Reeves, 2011; Reeves *et al*., 2009; Rice *et al*., 2010). Conducting this ethnographic study in a paediatric setting aims to fulfil the need for such an approach to be conducted in this setting. Moreover, analysing and structuring the data corpus through Goffman's (1959) lens of scriptedness helped to provide insight in new ways of how IPC was enacted and its relationship with the categories of scripts. Thus, this study will build upon that body of literature by employing the aims and objectives given in Section 1.3.

1.5 Thesis overview

This thesis is organised in nine chapters, which present and discuss the literature surrounding IPC, the context, methods and the findings of this study. After this brief introduction, **Chapter Two** critically reviews the literature concerning IPC in both the adult healthcare settings and paediatric health and social care settings. After giving an account of the literature search strategies, the chapter discusses the importance and

benefits of IPC and the factors that affect it. The chapter also succinctly addresses the theoretical perspectives used by other researchers in researching IPC.

Chapter Three offers an explanation and discussion of the methodology and methods employed in this study. It includes an account of the theoretical perspectives that act as a backdrop to this study, namely, constructionism, symbolic interactionism, and Goffman's social dramaturgical theory. It also discusses ethnography and how the issue of insider/outsider research affects the study. The data collection section discusses the intricate strategies employed to carry out ethnographic research through participant observation and formal and informal interviews and the art of conducting research in a bilingual group. This is followed by an explanation of how data were analysed, enhanced with tables and figures for clarity. A summary of how ethical issues were addressed is also given. The chapter concludes with a reflective account of the role reflexivity played in this study.

Chapters Four to **Eight** present and explain the findings of this study. They start by examining the acts of information exchange in IPC, enacted mostly synchronously but also asynchronously. These consist of; asking for information and associated responses, giving of information proactively, transferring of work and escalation of care, and two-way negotiation. **Chapter Five** focuses on asynchronous IPC and the different ways in which this is enacted. The aim of **Chapter Six** is to explain the categories of scriptedness (See Section 3.4.2) evoked when enacting IPC, illustrated with examples of encounters that represent a category of script. Multi-level scripts guide some IPC encounters and these will be examined in **Chapter Seven**. The aim of **Chapter Eight** is to examine clinical encounters where IPC was observed in this setting and to scrutinise the scripts they evoked.

Chapter Nine offers a discussion of the main findings in relation to the wider literature, especially those related to weakly-scripted encounters and their advantages, the use of metascripts in multi-level encounters, such as during the ward rounds, and the interplay between synchronous and asynchronous IPC. This chapter will further discuss the scriptedness of enacting IPC and the usefulness of analysing IPC through the lens of scripts. This chapter goes on to discuss the measures taken to ensure trustworthiness in the process of this thesis. Being a practitioner and researcher has its advantages and

disadvantages and these will be discussed in this chapter, followed by an account of my personal development through this journey. This chapter also proposes several recommendations for different groups of people, such as those in education, clinical practice and management, and implications for further research.

Chapter Ten presents the final conclusions drawn from the study. It discusses how adding Engeström's (2008) theory to Goffman's (1959) and Gioia and Poole's (1984), gave me analytical purchase and helped to achieve a deeper understanding of IPC in the study setting.

Chapter 2 Literature review

2.1 Introduction

This chapter will review the literature pertaining to interprofessional collaboration (IPC). Since literature in paediatric IPC was limited and only two studies of IPC with children who are hospitalised were found, I am going to review other literature regarding IPC, including IPC in adult patient care. This chapter starts with presenting the search strategies (Section 2.2) conducted to find the relevant literature. It is then followed by a brief overview about IPC (Section 2.3).

Section 2.4 will review the benefits of IPC, followed by a review of literature pertaining to IPC in adult patient care settings (Section 2.5). The chapter will then review studies with focused themes. This covers the major factors which affect IPC (Section 2.6) with particular reference to the various barriers to collaboration (Section 2.6.6).

While the information presented in prior sections is based mainly on literature related to adult settings, Section 2.7 reviews literature about paediatric social and healthcare settings in general. This is followed by a more focused review on studies in IPC in paediatric settings (Section 2.8). The theoretical perspectives used to provide insight into IPC are presented in Section 2.9 whilst a brief overview of this chapter is given in Section 2.10.

Before proceeding to discussing the literature, an outline of how the systematic literature search was conducted is presented in Section 2.2. I have tried to be systematic in the search so that the literature discussed is as complete and representative as possible to address the research question which reads:

How is IPC enacted by professionals working with hospitalised children and their families?

2.2 Literature Search Strategies

The literature search comprised of the following steps:

- The initial scoping search (Section 2.2.1)
- The focused systematic searches (Section 2.2.2)
- The updating of the various searches (Section 2.2.3)
- The appraisal of the various studies (Section 2.2.4).

2.2.1 The initial scoping search

An initial scoping review was commenced in June 2011 (I was concurrently working on my PhD proposal) to see what literature regarding interprofessional collaboration was available. This search without any limits yielded 318,155 hits. Besides looking at studies about IPC, a number of good quality publications around IPC were saved to use for general reading purposes. Some of this information has been incorporated into this literature review.

This initial search revealed that very little literature pertaining to IPC in paediatric in-hospital care is to be found. The scoping review also identified important background literature, which have been included in Sections 2.3 and 2.4.

This allowed me to:

- Understand the broad history of IPC literature;
- Identify key words and reasonable limits for more focused searches;
- Identify and study methodologies / theoretical lenses used by other researchers;
- Identify health and social care paediatric areas where IPC was examined.

2.2.2 The focused systematic searches

These systematic searches were carried out in three steps which will be presented in the next sections.

2.2.2.1 Systematic Search: Step One

After receiving ethical approval and having registered for my PhD, a more systematic literature search was conducted. This step focused on research studies in relevant care contexts but excluded the general background reading that had been included in the initial scoping review (Section 2.2.1).

Many different terminologies were used for interprofessional collaboration resulting in a 'terminological quagmire' (Leathard, 2003, p. 5) making research in IPC complicated because of the different terms used interchangeably (Perreault & Careau, 2012; Zwarenstein, Goldman, & Reeves, 2009). This includes the hyphenated versions of some of the keywords used.

The keywords searched included: 'interprofessional,' 'multiprofessional,' 'interdisciplinary,' 'multidisciplinary,' 'inter-professional,' 'multi-professional,' 'inter-disciplinary,' 'multi-disciplinary,' 'collaboration,' together with 'paediatrics,' 'pediatrics,' 'children,' 'childcare,' 'child health services,' 'Malta' and 'Maltese.'

At this point, when using the word 'collaboration,' I chose not to include other terms which are synonymous with 'collaboration,' such as 'teamwork,' 'partnership,' 'communication,' 'coordination,' 'integration,' and 'shared/joint working.' I decided to focus on 'collaboration' and ignore the other terms usually synonymous with 'collaboration.' I do acknowledge that by not including these terms at this stage might have led to my having missed out on some relevant studies. However, these other concepts were searched at a later stage according to the findings that emerged from the data.

Inclusion and exclusion criteria were determined before the search was carried out and are presented in Table 2.1.

Table 2.1 Inclusion and exclusion criteria

Inclusion criteria
Research Studies: • Where two or more different professions are included in IPC; • Published in the English language; • IPC related to paediatric health or social care services; • IPC related to in-patient adult healthcare.
Exclusion criteria
Research Studies: • Focusing on interprofessional education rather than IPC; • Focusing on IPC that does not include health and social care; • Opinion pieces and editorials (used for background reading).

Setting inclusion and exclusion criteria may have limited the search. For example, limiting the search to literature published in the English language may have excluded other important studies. From my observations, literature pertaining to IPC in paediatric health and social care is most prominent from the Nordic countries, some of which were also published in the English language and referred to in this study.

I first conducted a Meta-search using the search engine Hybrid Discovery (HyDi) through the University of Malta (UoM) electronic library (which has additional features to focus and refine the search). This platform includes the following databases: ERIC (U.S. Dept. of Education), Arts & Humanities Citation Index (Web of Science), Cambridge Journals (Cambridge University Press), Directory of Open Access Journals (DOAJ), Emerald Journals (Emerald Group Publishing), Health Reference Center Academic (Gale), Inderscience Journals, Informa - Informa Healthcare (CrossRef), Informa - Taylor & Francis (CrossRef), Medknow Publications, MEDLINE (NLM), OneFile (GALE), Oxford Journals (Oxford University Press), SAGE Journals, Science Citation Index Expanded (Web of Science), SciVerse ScienceDirect (Elsevier), Social Sciences Citation Index (Web of Science), SpringerLink Open Access, Taylor & Francis Online Journals, Wiley Online Library.

The search was filtered to include peer-reviewed articles published in the English language with the search term to be found in titles only, which had been published

between January 1970 and November 2013 and which were available in full text. Interest in collaboration as part of the solution for a number of problems started around the eighties (Roaf, 2002; Roy, 2001), although the field of interprofessional research dates back to the seventies (Paradis & Reeves, 2013). I also used Boolean operators AND/OR. Details of how I combined key words are given in Table 2.2.

Table 2.2 Literature search strategy: Step One

Search engine/ databases	Words searched	Hits	Retained
- Hybrid Discovery (Hy Di); - ERIC (U.S. Dept. of Education); - Arts & Humanities Citation Index (Web of Science); - Cambridge Journals (Cambridge University Press); - Directory of Open Access Journals (DOAJ); - Emerald Journals (Emerald Group Publishing); - Health Reference Center Academic (GALE); - Inderscience Journals; - Informa - Informa Healthcare (CrossRef); - Informa - Taylor & Francis (CrossRef); - Medknow Publications; - MEDLINE (NLM); - OneFile (GALE); - Oxford Journals (Oxford University Press); - SAGE Journals; - Science Citation Index Expanded (Web of Science); - SciVerse ScienceDirect (Elsevier); - Social Sciences Citation Index (Web of Science); - SpringerLink Open Access; - Taylor & Francis Online Journals; - Wiley Online Library.	Interprofessional OR multiprofessional OR interdisciplinary OR multidisciplinary OR inter-professional OR multi-professional OR inter-disciplinary OR multi-disciplinary AND collaboration.	35,190	30

The first search with the filters described above, yielded 35,190 hits. I retained and discarded the retrieved items on the basis of the inclusion / exclusion criteria given in Table 2.1. After I deleted 184 duplicates and looked at all the titles and abstracts, I

retained 180 articles that appeared to be relevant to my research question. On scanning the whole article and choosing those that were most relevant to my question, I retained 30 articles. These studies are presented as part of a list given in Appendix One. A PRISMA flow diagram is given in Figure 2.1 to illustrate how I reduced the hits down to 30 studies in step one. This figure summarises this process and is an example of how the searches were carried out. The bibliographic search still generated over 35,000 hits and it was very challenging to reduce the body of research to be reviewed in detail to a mere 30 articles.

2.2.2.2 Systematic Search: Step Two

By using the same databases with the same filters as the first search, I used wildcards to truncate words. The use of wildcards is an advanced search technique used to maximise the search results. I used wildcards during this step and not before because when I used them during step one, the search yielded poor results. In Step Two, I used the following keywords to search: 'Interprofessional' AND 'collaboration' AND 'paediatrics' OR 'pediatrics' OR 'child*' OR 'child health services' AND 'Malta' OR 'Maltese;' therefore adding the paediatric aspect in a Maltese context. These two keywords were not limited to being found in titles only but were set to be searched in all text. This search yielded 61,566 hits and by using the same inclusion and exclusion criteria on scanning the titles and abstracts, I retained 15 additional articles. As shown in Table 2.3, only the term 'interprofessional' was used in this step. The reason for this was that this was the most commonly used term since the late 1990s (Paradis & Reeves, 2013).

Table 2.3 Literature search strategy: Step Two

Search engine/ databases	Words searched	Hits	Retained
- Hybrid Discovery (HY DI).	Interprofessional AND collaboration AND paediatrics OR pediatrics OR child*, OR child health services AND Malta OR Maltese.	61,566	15

2.2.2.3 Systematic search: Step Three

This step was conducted to double check that nothing of relevance and of suitable quality was missed. I searched the EBSCO host where I could manually select the

databases. These included: Academic Search Complete, Cochrane Central Register of Controlled Trials; Cochrane Database of Systematic reviews, Cochrane Methodology Register, PsycINFO, Medline Complete, and CINAHL Complete.

Using the same filters as before, I retrieved two additional studies. I also searched PubMed and after applying the previous filters as well as the inclusion and exclusion criteria, a further study was included. Therefore, 48 studies were retained from the electronic searches. Reviewing the reference lists of the retained articles provided new links to other related articles based on the key words and 13 other articles were retrieved after eliminating duplicates (See Table 2.4) making a total of 61 studies in all to add up all the studies retrieved in the three steps i.e. 30, 15, 2, 1 and 13 (Total 61) (Table 2.5). A list of the retained studies is given in Appendix One. These studies, along with other relevant opinion articles retrieved from the scoping review, will be used in this chapter in the different subheadings. In addition I will also integrate the studies retrieved from the updating searches.

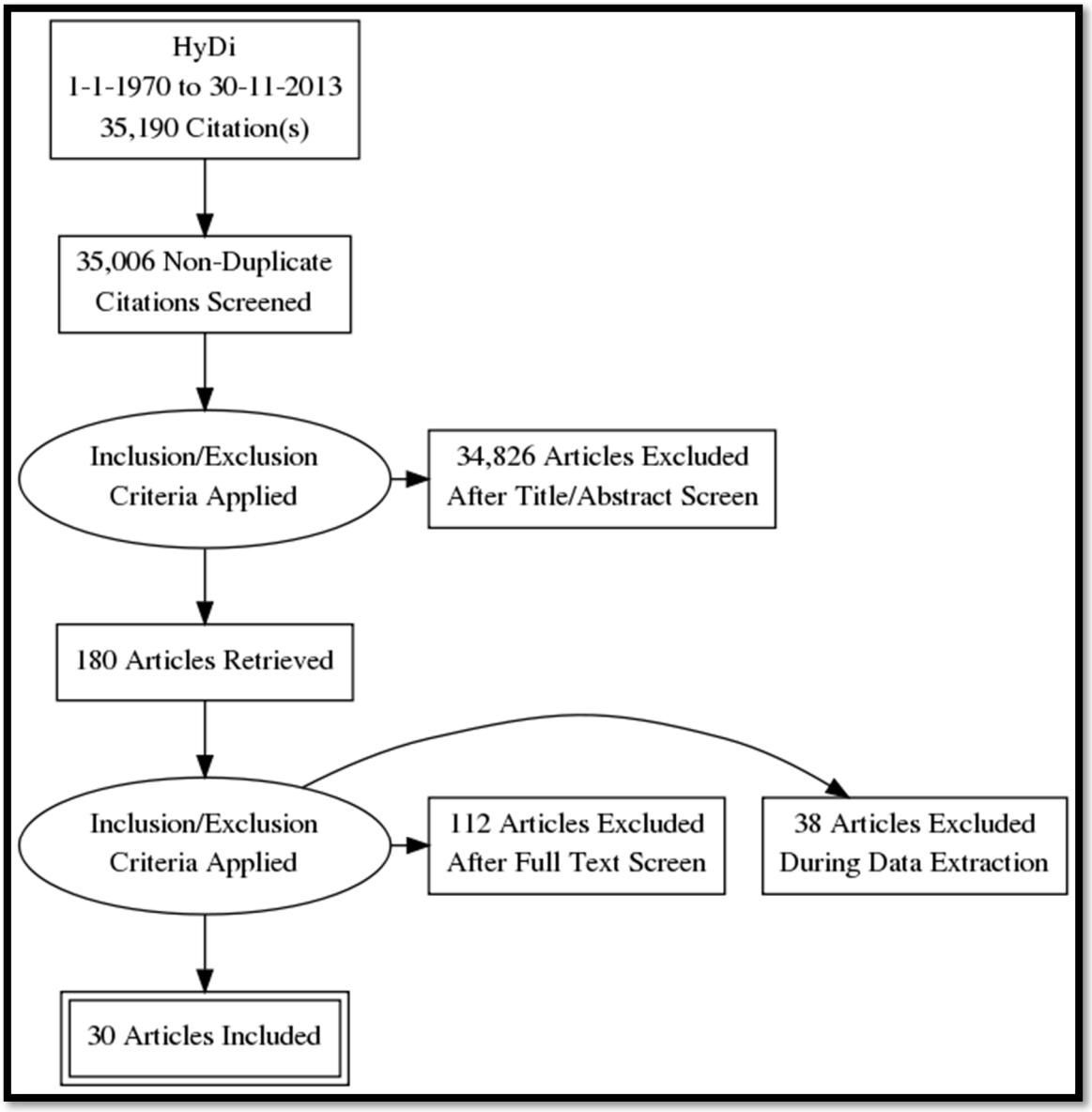
Table 2.4 Literature Search Strategy: Step Three

Search engine/ databases	**Words searched**	**Hits**	**Retained**
Selected databases from EBSCO Host: - Academic Search Complete, - Cochrane Central Register of Controlled Trials; - Cochrane Database of Systematic reviews; - Cochrane Methodology Register; - PsycINFO; - Medline Complete; - CINAHL Complete.	Interprofessional AND collaboration AND paediatrics OR pediatrics OR child,* OR child health services AND Malta OR Maltese.	32	2
- PubMed	Interprofessional AND collaboration AND paediatrics OR pediatrics OR child*, OR child health services AND Malta OR Maltese.	203,384	1
Retrieved from reference lists in selected articles.			13

Table 2.5 Total of studies retained

Step	Number of hits	Studies retained
Step 1	35,190	30
Step 2	61,566	15
Step 3 (Including studies retrieved from reference lists)	203,416	16
Total	**300,172**	**61**

Figure 2.1 PRISMA Flow Diagram



2.2.3 The updating of the various searches

The searches made in HyDi were saved to my electronic library folders (known as queries) and were given the command to automatically alert me when any new articles pertaining to the search words used were published. Thus, I was kept updated with any new publications and relevant studies and this was used to regularly update the literature review with the latest studies.

A considerable number of retained studies were found from the Journal of Interprofessional Care whilst other related journals were the International Journal of Integrated Care and Journal of Research in Interprofessional Practice and Education. Therefore, I subscribed to the publishers' email alerts for these journals' tables of contents and checked the list for any relevant studies of every issue when it was published. Moreover, I subscribed to ZETOC, a research database alerting service and was informed when authors/researchers in IPC published any new articles. Thus, I was constantly made aware of any new literature soon after they had been published. Through this system, I was able to add 18 new studies.

During the research process, other systematic searches, similar to the ones presented here, were conducted to retrieve literature pertinent to the categories and subcategories that emerged from the study. These included terms such as 'synchronous collaboration,' 'asynchronous collaboration,' and 'communicating collaboratively.' In July 2018, another updating search took place targeting studies published between December 2013 and July 2018. This yielded 4,337 hits, 25 of which had not been identified by any previous searches. On reviewing them, only two were deemed to be relevant to this study and none involved paediatrics. Individual searches were then carried out in CINAHL. This yielded another 24 hits, but many of the studies had already been identified. Another PubMed search yielded a further 178 hits, resulting in one relevant study relating to paediatrics.

2.2.4 The appraisal of the retained studies

The retained studies were reviewed using the Critical Appraisal Skills Programme (CASP) checklist tool relevant for the type of study (CASP UK, 2013). The CASP suite of resources was chosen because it has multiple critical appraisal tools, each designed for reviewing study reports from a different research approach (e.g. systematic reviews,

qualitative studies and randomised controlled trials). The majority of the retained studies required the tool for qualitative studies (46), one study required two checklist tools because it had a mixed methodology, four were systematic reviews and ten were quantitative. The CASP tools are very comprehensive and each has an initial section where you screen the study for its relevance, thus immediately deciding what to do with the study.

Having discussed the search strategies, the reviewed literature on IPC will be discussed in further detail in Section 2.3.

2.3 Interprofessional Collaboration

There is a body of literature pertaining to IPC, some of which are expressing individuals' opinion and others are anecdotal pieces. However, there are also a number of empirical studies that inform this phenomenon. Despite this, there is not enough information about the processes of collaboration (Ness *et al*., 2014; O'Connor & Fisher, 2011; Zwarenstein *et al*., 2009). Some of the reviewed literature set the context for policies regarding IPC (Interprofessional Care Steering Committee, 2007; Leathard, 1994; Leathard, 2003; World Health Organisation, 2010); and some also provide information for competencies in IPC that guide interprofessional education (Barr *et al*., 2005; Freeth, Hammick, Reeves, Koppel, & Barr, 2005; Hammick *et al*., 2009; Interprofessional Education Collaborative Expert Panel, 2011; World Health Organisation, 2010).

There are also research studies that shed light on the nature of IPC in various adult hospital settings (Reeves *et al*., 2009; Rice *et al*., 2010). To the best of my knowledge, there are very few studies examining IPC in settings where children are hospitalised. Therefore, I will draw upon literature from adult settings and also a number of research studies done in other paediatric settings, such as community mental health and residential care to identify what we already know about IPC and why it is important that my study focuses on how IPC is enacted in paediatric care. Indeed, I hope that this thesis will contribute towards providing literature pertaining to research studies positioned within a hospital's inpatient paediatric settings. My intention is to assist in extending that body of literature by considering how IPC is enacted in such a setting.

The development of services needed by patients has become so complex that the previous 'one size fits all' concept is no longer acceptable and a single profession does not have the capability to meet these needs comprehensively (Gocan, Laplante, & Woodend, 2014; Graham & Barter, 1999; Hammick *et al*., 2009; Kenny, 2002). This may be the reason why IPC has been so widely advocated and debated in healthcare. Many healthcare systems are now in agreement that the way forward to satisfy the needs of patients is to look at these needs holistically (Leathard, 2003). Such a complex development requires an even more complex and dynamic solution (Schmitt, 2001), hence IPC.

In a systematic review, Zwarenstein, Goldman and Reeves (2009) assert that results from previous studies conducted in adult care settings, show that interventions to improve IPC are promising and that IPC may be the way forward to provide quality care for patients. IPC has the potential to show improvement in quality care as an outcome (Gocan *et al*., 2014; Reeves *et al*., 2017). On the other hand, failure to collaborate had devastating effects in cases across the world (Francis, 2013; The Joint Commission, 2016). Reeves and colleagues (2017, p. 6) add that research suggests, "improved collaboration between multiple professions may be essential for the provision of effective and comprehensive care."

Despite the fact that IPC is axiomatic, it still depends on the willingness of the professionals to collaborate (D'amour & Oandasan, 2005; Henneman, Lee, & Cohen, 1995; San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005) and unless professionals are open to collaboration, then IPC will remain elusive. IPC is likely to be sustained if there is indeed the need for it and "continued scope for development of the collaboration" (Freeth, 2001, p. 37). Drivers may include gaps and inadequacies in the service being provided, individuals who are enthusiastic about IPC and strive to meet the demands of an ever-increasing complex society, organisational policies, and individual philosophies (Easen, Atkins, & Dyson, 2000; Freeth, 2001).

2.3.1 The different forms of collaboration

The previous definition of IPC given in Section 1.2 asserts that different professionals "come together to solve problems or provide services" (Reeves *et al*., 2010 p xiii). The

'coming together' may vary in commitment and involvement and different degrees of collaborative relationships may form. The variety of forms of collaboration is what makes it so difficult to evaluate (Meads & Ashcroft, 2005).

In practice, an intense form of collaboration may not always be necessary, generally depending on the care dependency of the patient (Thylefors, Price, Persson, & Wendt, 2000). In most cases, a short-lived collaboration may be all that is required. On the other hand, some patient cases require professionals to work together more intensively.

Literature pertaining to adult healthcare shows that most collaboration occurs during informal interactions occurring backstage (See Section 3.4.1) as opposed to during formal frontstage interactions (Allen, 1997; Cott, 1998; Ellingson, 2003). However, earlier literature shows that there are more studies addressing formal interactions, such as during multidisciplinary team (MDT) meetings and ward rounds, rather than during informal interactions that mainly occur away from patients. This study addresses both frontstage and backstage interactions. However, a substantial component of my findings and discussion will be dedicated to the informal aspect of interactions in an attempt to fill this gap.

Informal work is reminiscent of Nardi and Engeström's (1999, p. 1) invisible work and is not given much attention in IPC literature (See section 9.7). They describe that invisible work takes the form of "… work defined as routine or manual that actually requires considerable problem-solving and knowledge …" This is similar to the day-to-day unscheduled informal interactions enacted by different healthcare professions during their everyday work. Most practitioners, including management, do not acknowledge or value the work which takes place during these interactions. Sometimes, even the practitioners themselves are not aware of the kind of work that is achieved during this invisible work (Nardi & Engeström, 1999).

Invisible work was also examined in the work of Star and Strauss (1999, p. 15) who discussed three kinds of invisibility: "creating a 'non-person' in domestic work; disembedding background work; and going backstage." Star and Strauss compared this to work carried out by nurses whose work disappears into the background because often, it is not documented or formally acknowledged. A significant aspect of

invisible work is informal communication which is often interrupted, but still remains an essential component of effective collaboration (Kraut, Fish, Root, & Chalfonte, 1990; Whittaker, Frohlich, & Daly-Jones, 1994).

Whatever form healthcare organisation or organising services take, collaboration is always central (D'Amour, Goulet, Labadie, San Martín-Rodríguez, & Pineault, 2008). Having said this, IPC, although highly promoted, is not easy in practice (Smith, Carroll, & Ashford, 1995). Problems that inhibit IPC are several but one that is fundamental relates to interactional factors (San Martín-Rodríguez *et al.,* 2005). If IPC is to be enacted, then a better understanding of interaction and IPC processes is needed. Some researchers identified being positive, having good interpersonal relationships (See Section 2.6.1), having effective communication (See Section 2.6.2), mutual respect and trust as being key elements of collaboration (San Martín-Rodríguez *et al.,* 2005).

In an attempt to better understand collaboration, D'Amour and colleagues (2004) identified other indicators which include four dimensions namely; governance, shared goals and vision, internalisation, and formalisation. They created a model that was tested in various collaborative settings (D'Amour, Goulet, Pineault, Labadie, & Remondin, 2004; D'Amour *et al*., 2008) based on these four dimensions. Ten indicators then operationalise the four dimensions. One of the indicators relating to the dimension of formalisation (structuring clinical care) is that of information exchange, a dimension which is central to this study as seen in the findings Chapters Four to Eight. In their study, D'Amour *et al.* (2008, p. 11) propose a typology of collaboration that "takes into account the degree of collaboration as shown by the ten indicators of the four dimensions of the model of collaboration." They establish that their empirical data suggests a three-level typology "active collaboration, developing collaboration and potential collaboration" (2008, p. 11).

2.4 The Importance and Benefits of IPC

Throughout the 1990s and into the 21st century, more advantages of IPC have been realised (Paradis & Reeves, 2013). These include having professionals focus on what they have in common and sharing their knowledge and expertise with other professionals (Leathard, 2003). IPC also improves access to healthcare, use of

resources, efficient services that lead to better outcomes, and thus, improved costing (Canadian Health Services Research Foundation, 2007; Safran, 2003).

The benefits of IPC and how they affect patient care and job satisfaction in a positive way have been well documented in adult intensive care units (Baggs, Ryan, Phelps, & Richeson, & Johnson, 1992); office practices, where it reduced patients' readmission to hospital, physician office visits and helped chronically ill patients to maintain their healthy status (Sommers, Marton, & Barbaccia, 2000); and patient satisfaction, better health knowledge and better skills related to self-care strategies (Canadian Health Services Research Foundation, 2007). In the context of family-centred care, as is the case in most paediatric settings, IPC is associated with positive outcomes, such as safer care, improved communication and better compliance to treatment (Zimmerman & Dabelko, 2007).

IPC is also important as it overcomes fragmentation of care (Hudson, 2002; Steihaug *et al*., 2016). In a systematic review on collaboration between nurses and doctors, Zwarenstein and Bryant (2000) also identified the above-mentioned benefits for professionals and patients. An important motivator for IPC is patient safety and that is why policy makers advocate collaborative practice (Solomon, 2010). Indeed, IPC is needed to counteract the consequences of non-collaboration, which may include duplication and fragmentation of care, role ambiguity and interprofessional conflict. When team working was lacking in a discharge rehabilitation team, "there was clear uncertainty about who was responsible for what, causing duplication, service gaps and time delays in discharge planning with poor decision-making." (Pethybridge, 2004, p. 38). IPC occurs in settings where professionals are clearly aware of what their tasks and goals entail (Reeves *et al*., 2009).

2.5 Scope and quality of literature on IPC in adult settings

Researchers have tried to understand the phenomenon of IPC by focusing studies on different aspects of IPC and also using different methods of generating new knowledge. This section will summarise the scope of studies that will be reviewed further in the Subsections 2.6.1 to 2.6.6.

Some researchers addressed the nature of interprofessional interactions and doctor-nurse relationships (Allen, 1997; Reeves *et al*., 2009; Rice *et al*., 2010). Indeed, there is a body of literature from the 1980s and 1990s that focus on this specific relationship and collaboration (Baggs & Schmitt, 1988; Henneman *et al*., 1995; Stein, Watts, & Howell, 1990). Ellingson (2003) focused on the dynamic teamwork enacted in the clinic backstage while Jones and Jones (2011) explored the perceptions of staff and how an innovative intervention to improve teamwork affected IPC. Other researchers explored the professionals' experiences of interprofessional relationships (Collins & McCray, 2012).

Some studies addressed the development or evaluation of measuring tools measuring IPC (Guevara *et al*., 2008; Parker-Oliver, Bronstein, & Kurzejeski, 2005). For a review of the quantitative measures to evaluate collaborative practice I referred to Thannhauser, Russell-Mayhew, and Scott (2010). Additionally, other researchers identified factors that may enhance, promote or inhibit IPC (Mulvale & Bourgeault, 2007; Pethybridge, 2004).

This section will commence by discussing the systematic reviews conducted on IPC, the first of which was carried out in 2000 by Zwarenstein and Bryant followed by two updates by Zwarenstein *et al*. (2009) and Reeves *et al*. (2017). Literature pertaining to IPC is on the increase and more understanding is needed on how interventions can improve IPC in practice and healthcare (Zwarenstein et al., 2009). In their systematic review on IPC, Zwarenstein and colleagues focused on evaluating the impact that a practice-based intervention to improve IPC had, when compared to settings where no interventions occurred or where another type of intervention was implemented. The intervention was intended to improve collaboration between two or more health and/or social care professionals and expected to affect one or more of the following outcomes namely; patient satisfaction, the effectiveness and efficiency of the care provided and the degree of IPC achieved. This review was an update of another review conducted by Zwarenstein and Bryant (2000) where only two studies were included. In the 2009 systematic review, five RCTs were reviewed. To provide a more rigorous review in this update, RCTs only were chosen because these are high up in the hierarchy of evidence (Hemmingway & Brereton, 2009). One of the inclusion criteria in the 2009 review was

that it included studies that were conducted involving all healthcare professionals and not just doctors and nurses as in the previous review.

In the studies examined in this systematic review, interdisciplinary rounds were found to have a positive impact on the patient's length of stay and the charges incurred (Curley, McEachern, & Speroff, 1998) while hospital telemetry rounds had no impact on patient's length of stay (Wild, Nawaz, Chan, & Katz, 2004). Both studies were conducted in the USA, one in an acute care hospital and the other in a community hospital. The difference in the results may be due to the characteristics of the group of patients chosen.

In the same review, monthly interdisciplinary team meetings improved practice in nursing homes related to the quality and quantity of psychotropic drugs prescribed in Swedish nursing homes (Schmidt, Claesson, Westerholm, Nilsson, & Svarstad, 1998). However, a study comparing interdisciplinary team meetings through either videoconferencing or audio conferencing had mixed results (Wilson, Marks, Collins, Warner, & Frick, 2004). While there was a decrease in the number of conferences needed for each patient and patients were on treatment for a shorter duration, it also showed no difference in the number of communications between professionals, length of conference and occasions of service. Nevertheless, multidisciplinary meetings facilitated by an external auditor improved care and increased the audit activity in another study (Cheater, Hearnshaw, Baker, & Keane, 2005).

Zwarenstein *et al.* (2009) acknowledge the review's limitations due to having a small number of studies. They state that these preliminary findings are to be used with caution and no conclusion is definite as yet. The issue of whether these results can be applied locally varies. Most interprofessional rounds only include doctors and nurses locally (See section 7.2) and there are no externally facilitated interprofessional audits. However, interprofessional meetings are similar in nature (See section 7.3). Although this review sheds light on the possible effects that an intervention to improve IPC can have on healthcare and patient outcomes, it does not shed enough light on the processes of collaboration and how IPC is enacted in different settings. By focusing my study on how IPC is enacted and defining what the constituent acts are, it aims to address this gap.

In an update to the 2009 review, the aim was still "to assess the impact of practice-based interventions designed to improve IPC" in healthcare (Reeves *et al*., 2017, p. 1). The researchers added four more studies. Similar to Cheater and colleagues (2005), the effect of an externally facilitated IPC intervention continued to be of very low certainty in evidence of improvement (Black *et al.*, 2013; Deneckere *et al.,* 2013; Strasser *et al.,* 2008). Calland and colleagues (2011) added a new intervention by using a procedure checklist with interprofessional surgical teams before surgery (Procedure checklists will be discussed in Section 9.4.1). This intervention also resulted in low certainty evidence of improving IPC. Overall, the studies reviewed did not produce "sufficient evidence to draw clear conclusions on the effects of IPC interventions." (Reeves *et al*., 2017, p. 21).

An ethnographic study by Reeves and colleagues (2009) was carried out in two general and internal medical wards within two different hospitals. They chose this research design because they argued that despite the increasing number of studies looking at IPC, there is still lack of understanding of this phenomenon. Reeves and colleagues mainly attributed this to interviews not giving a whole picture of how collaboration is manifested in its milieu. Snelgrove and Hughes (2000) had already previously identified this. Available research in IPC "has not provided sufficiently theorised accounts of their findings" (Reeves et al., 2009, p. 634) and thus "fails to be informed by relevant theoretical explanations which can enhance our understanding" of IPC (see Section 2.9). To counteract these two shortcomings in the literature pertaining to IPC, Reeves and colleagues used observation as one of the methods of data collection and Straus' (1978) Negotiated Order Theory as a theoretical lens to analyse data.

Reeves *et al.* (2009, p. 641) found that in the setting they chose, "interprofessional interactions between physicians and other health professionals ... were terse in nature." The interactions were mainly unidirectional, flowing from the physicians to other health professionals. This concurs with Karam and colleagues (2017) who were studying IPC between general physicians and emergency departments in Belgium. They asserted that data and information exchange were poorly developed. This is very different from what is expected in IPC. On the other hand, interactions between nurses and other professions, excluding physicians, were "more in-depth in nature" (Reeves *et al*., 2009, p. 641) and included both informal and formal interactions pertaining to work and of a

social nature. Interactions between members of the same profession were even richer in nature. These findings correlate with earlier studies carried out by Zwarenstein, Bryant and Reeves (2003) and Reeves and Lewin (2004).

Indeed, Reeves and colleagues (2009) assert that there was a non-negotiated order occurring between physicians and other health professionals with the latter feeling that when they did try to create dialogue, they were either ignored or questioned about it. These researchers concluded that, "Opportunities for rich interprofessional negotiation was therefore limited" (2009, p. 642) with little space for meaningful interactions regarding patient care. In contrast, an interprofessional negotiated order was found between nurses and the other allied health professions.

Thus, in the study by Reeves *et al.* (2009), conducted in Canada in two adult wards, findings showed a 'disconnect' between the positive outcome from other studies, such as those of Zwarenstein and colleagues (2009) and Gocan and colleagues (2014). Although there were policies in place to encourage IPC, findings showed that IPC was not always happening (Reeves *et al*., 2009). IPC was a rare occurrence in their study and the busier the area, the less IPC there was, especially between physicians and other professions. This may be attributed to the deep-set tradition of the physician being the leader in a group (Mulvale & Bourgeault, 2007) (See also Section 2.8.4). Mulvale and Bourgeault argue that doctors are legally responsible for "controlled acts" through legislation. Thus, policymakers promoting IPC need to first clarify the legal framework of the different professionals and their responsibility for patient care (Mulvale & Bourgeault, 2007, p. 59). Indeed, if interprofessional collaborative models are to succeed, then those in the collaboration need to first understand those traditional aspects that act as barriers to IPC advancement (See Section 2.6.6) and also create the necessary policy reform over the longer term to remove those same barriers (Mulvale & Bourgeault, 2007).

Having several documents in place, (Department of Health, 2001 (British); Health Canada, 2003; Ministry for Social Policy Health, Elderly and Community, 2009 (Malta); World Health Organisation, 2010) promoting IPC and its benefits, does not guarantee implementation of IPC. Despite the establishment of interprofessional community healthcare centres three decades before their study, Sicotte, D'Amour, and

Moreault, (2002) found little evidence of IPC in the settings they examined. However, others have argued that IPC can be enhanced through establishing standards, policies and protocols (Cabello, 2002; Henneman *et al.*, 1995; Johnson, 1992). Furthermore, according to these same authors, unified documentation and MDT meetings continue to benefit collaboration. Therefore, in order for IPC to be successful, all stakeholders need to be open to the concept of IPC, they need to have the required systems in place for it, as well as the appropriate structures to support it. If not, it is like having the pieces of a jigsaw without its picture (Scott, 1999). In healthcare today, this might not be a negative thing because when healthcare providers see change as a necessity, the picture is always changing and the jigsaw is never completed (Sennett, 2008).

In 2000, Linda Finlay asked the question "Are we up to this challenge?" (the challenge of IPC) (Finlay, 2002 p 185). This question followed her argument that sheds doubt on whether teams are an effective way of organising care, insisting that in practice, working in a team is full of problems. Pethybridge (2004) concluded that collaboration is a great challenge. However, drawing from Senge's (1990) work, Pethybridge argues that working as a team has so many advantages that teamwork needs to be encouraged despite its challenges. When teams share a common vision, the team may accomplish far more than individuals can on their own (Senge, 1990). Nonetheless, despite the increasing body of knowledge pertaining to IPC, "we still have little understanding of collaboration in action," meriting further research involving observation (Reeves & Lewin, 2004, p. 218), a gap that this study will address.

This chapter will now discuss the literature related to factors that affect IPC which has mostly been drawn from adult healthcare settings. I will indicate when some paediatric literature is also weaved through the sections. The literature related to paediatrics will be reviewed in Sections 2.7 and 2.8.

2.6 Factors that affect IPC

According to various authors, collaboration is most challenging and has the potential to generate benefits that depend on certain elements (Lawson, 2004; San Martín-Rodríguez *et al.*, 2005). Several issues were identified which were seen to enhance IPC while on the other hand, others were identified which inhibit IPC. These will be

discussed in the coming sections which focus on; relationships, effective communication, shared responsibility and decision-making, self-confidence, time and space, and finally, barriers to collaboration.

2.6.1 Relationships

Relationships are pivotal to collaboration (Solomon, 2010; Strong, Sutherland, & Ness, 2011) even though new relationships take time to develop (Steihaug *et al.*, 2016). Time, or the lack of it, has been identified as one of the obstacles inhibiting IPC. Indeed, the issue of time may be one of IPC's main concerns (See Section 2.6.5). Relationships are so central to IPC that American physicians coined the term "relationship-centred care" that involves not only the relationship between professionals or between professionals and patients, but also the relationship with ourselves (Tresolini & Force, 1994).

Interprofessional relationships in healthcare may be short-lived especially in acute care settings (Reeves & Lewin, 2004). Moreover, relationships require a commitment to work together, share goals and being open in communication processes (McDaniel, 1995). The relationships described by Reeves and Lewin are continually being formed between individuals and organisations, resembling the process of knotworking, a concept developed by Engeström (2000). In knotworking, the relationships that are formed and dissolved as different professionals go about their everyday work are likened to different threads being tied and untied. Reeves and Lewin conducted their study in an adult acute care setting which involved many healthcare providers (HCP) and where turnover was likely to be high. They did not rely only on interviews but used observations as a method of data collection "to facilitate a comprehensive understanding of collaboration" (Reeves & Lewin, 2004, p. 219). However, observations involving the patients were excluded. This may have changed the dynamics involved in such interactions.

2.6.2 Effective Communication

Another influencing factor which affects IPC is the presence or lack of effective communication and the supporting structures that are needed to sustain it (Karam *et al*., 2017; Steihaug *et al*., 2016). Effective communication is an "interactional element that influences the degree of collaboration" (San Martín-Rodríguez *et al.,* 2005, p. 141). In a review of theoretical and empirical studies, San Martin- Rodriguez and colleagues

identified communication as one of the determinants of successful collaboration. Drawing from work by Evans (1994), Henneman (1995), Johnson (1992), Lindeke and Block (1998), and Mariano (1989), San Martín-Rodríguez *et al*., (2005, p. 142) proposed three main reasons why communication is central to collaboration, namely:

- The development of collaborative practices demands that professionals understand how their work contributes to outcomes and to team objectives;
- Efficient communication is essential since it allows constructive negotiations with other professionals;
- Communication is a vehicle for other determinants of collaboration, such as mutual respect, sharing or mutual trust.

The review presented by San Martin-Rodriguez and colleagues included literature published between 1980 and 2003 and referred to three databases, namely Medline, CINAHL and Sociological Abstracts which may have limited the search. Another limitation to this review is that the authors did not give enough information regarding how they assessed the quality of the studies included. Despite this, this review is widely quoted (258 CrossRef citations) in literature relating to collaboration and has relevant information to the study in this thesis.

Well-functioning teams and development of good collaboration require effective communication (Ness *et al*., 2014; Thylefors *et al*., 2000), together with exchange of information, ideas and expertise (Berridge, Mackintosh, & Freeth, 2010; Steihaug *et al*., 2016). Berridge and colleagues assert that the reason for communication may range from the most basic form of maintaining orientation, to a higher degree of collaboration when making a suggestion or giving an opinion. Moreover, collaboration moves to a higher level when suggestions and opinions are sought from other professionals. Berridge and colleagues also included the architectural influences on communication and found that the design in one of the wards enriched the intra and interprofessional communication, while in another ward the design hindered effective communication (See section 9.2.3 for more discussion).

During collaboration all communications need to be done in a way that ultimately enhances the care delivered (McDaniel, Hepworth, & Doherty, 1992) and having the

roles of the different professions complimenting each other. Indeed, failing to do this may result in committing errors that lead to negative patient outcomes (Leonard, Graham, & Bonacum, 2004). On the other hand, according to the Department of Health (2007) in the U.K., working interprofessionally and having good communication skills are vital for successful outcomes.

Effective communication ensures quality in healthcare (Cornwall, Cornwell, Jarrett, & Boyce, 1993) but further research is needed to understand the complexities in communication between professionals and their entities (Øvretveit, 2009). The complexities of conflicting models of care create tensions, which require careful negotiation. For example, interprofessional learning opportunities at undergraduate level (Cullen, Fraser, & Symonds, 2003) and subsequently within established teams (Freeth *et al*., 2005) may be one approach to help individuals and teams to understand one another's assumptions and perspectives and improve collaboration. Active listening is another determinant of effective communication (Baggs & Schmitt, 1997) that allows clinical information exchange.

2.6.3 Shared responsibility and decision-making

Interprofessional working also entails sharing responsibility and shared decision-making that includes all professionals, as well as the patient (Deegan, 2010; Steihaug *et al*., 2016). However, Barr (2000), supported by Davoli and Fine (2004), caution that the trend towards becoming interprofessional should not be at the expense of losing sight of the profession, especially in continuing to strengthen a particular profession's expertise in certain knowledge and skills. Losing sight of the profession's strengths might lead to the disappearance of the expertise belonging to a particular profession that might affect decisions about patient care. Steihaug and colleagues (2016) synthesised eight papers from four separate but interlinked empirical projects conducted in Norway. Meta-ethnography was employed to understand how IPC challenges affect clinical practice in four different areas in healthcare. They gave detailed findings of the four projects by summarising them in a table. One limitation to one of the projects was that it had a small sample. Three of the four projects relied solely on interviews whilst one project used observations as well for data collection.

Solomon (2010) concluded that IPC should not involve training different professions to perform each other's roles or to think alike. IPC involves being responsible for the area of expertise whilst at the same time working with others (McMurty, 2007). Mulvale and Bourgeault (2007, p. 61) describe how to develop a culture of collaboration within the team and that besides professionals needing to understand each other's roles and practice styles, the different professions "must be recognised for their different strengths and approaches." The same authors also argue that by perpetuating their cultural difference, especially the responsibility related to treatment, professionals might create tension across professions. This may be one of the reasons why collaboration does not always work. Mulvale and Bourgeault conducted their study among mental health service providers in Ontario Canada. Data were collected through primary and secondary source literature related to primary care in mental health and twelve key informant interviews. Employing two methods of data collection might have enhanced convergence on truth; however, had they directly observed participants in practice, they could have been in a better position to understand the factors that affect collaboration. A thorough explanation of how data were collected and analysed was given, using the NVivo qualitative analysis software. Although member checks of relevant portions of the analysis were carried out (Mulvale & Bourgeault, 2007) and sampling continued until saturation of contextual factors was reached, the relationship between the researchers and participants was not mentioned, potentially subjecting the study to data collection and analysis bias.

Sharing responsibility and decision-making through working as a team is of particular importance when decisions are needed regarding discharging of patients (Laidler, 1994). Factors, such as "sharing, consensus and agreement, trust, being in a learning culture and good leadership" (Pethybridge, 2004, p. 38), enhance team working. Pethybridge asserts that joint documentation and training are also key factors promoting team working. Indeed, Pethybridge asserts where team working was lacking, some professionals rarely involved the patients in their decisions and discharge planning. Moreover, those professions who did involve patients did not share their information with their colleagues, implying that there was still fragmentation of discharge planning and duplication if the patient omitted to share such information with the next professional. It is also very easy to forget to include one of the stakeholders, especially

the patient, resulting in having care planned for them and not with them (Davoli & Fine, 2004).

2.6.4 Self-confidence

Kenny (2002, p. 311) determines that the "the key to successful collaboration is professional self-confidence that evolves out of the development of core skills and knowledge." In a study by Eilertsen *et al.* (2009), (See section 2.8.5 for more on this study) professionals reported that when support regarding IPC was minimal this put extra strain and stress on the individual professional and impinged on their self-confidence. Pfaff, Baxter, Jack and Ploeg (2014, p. 1149) found that "supportive team and organizational leadership" might even influence the confidence in practicing IPC developed at undergraduate level. The key factors that encourage this confidence are knowledge and experience.

Self-confidence in one's professional role is also highly related to feelings of trust in oneself and in other professionals (Henneman *et al.,* 1995). Moreover, researchers conclude that at both levels, trust requires professionals to be competent in their skills and knowledge, and most importantly competent in their work experience (Henneman *et al*., 1995; Warren, Houston, & Luquire, 1998).

2.6.5 The issue of time and space

Well-functioning teams and development of good collaboration require time (Rice et al., 2010; Steihaug *et al*., 2016; Thylefors *et al*., 2000) (See Section 2.8.1 for more on the Thylfors study). Indeed, Thylefors and colleagues determined that the average team member spends at least ten hours per month in formal team meetings. They continue to argue that because of the nature of informal meetings, they demand availability of ad-hoc time and also necessitate free access to a suitable meeting place implying the need for a common work base (This will be discussed further in Section 9.2.3). Eilertsen *et al.* (2009) also raised the issue of IPC being too time-consuming. Indeed, they consider lack of time to be a limitation to collaboration. This was found to be the case when team meetings, chaired by different individuals every time and not by one coordinator, took longer than expected. This is congruent with Thylefors *et al*. (2000, p. 523) who attributed "poor meeting technique" to not having prepared enough for the meeting. Half of the teams in the Thylefors study had a constant chairperson, while the other half

had rotating chairpersons. These findings imply that IPC entails time and discussions (D'Amour *et al*., 2005).

The time a professional spends enacting IPC also indicates that some professionals are more inclined towards IPC (Ødegard, 2007). The educational background a professional has acquired and also the organisational culture may influence this. Moreover, sharing time (such as during MDT meetings) and space (such as the nursing station), helps in fostering communication and collaborative care (Conn, Oandasan, Creede, Jakubovicz, & Wilson, 2010; Mulvale, Danner, & Pasic, 2009). Indeed, time pressures and lack of spaces in which to conduct face-to-face meetings hinders IPC (Steihaug *et al.,* 2016).

Having discussed some of the factors that affect IPC identified through the literature, those factors that act as barriers to IPC will be discussed in Section 2.6.6.

2.6.6 Barriers to Collaboration

Although it is clear that professionals have to collaborate in order to deliver holistic care (Oandasan, Baker, & Barker, 2006), effective collaboration is not always easy to achieve (Reeves *et al*., 2010); there are certain issues in care which clinicians have identified to account for lack of collaboration. These issues are known to cause friction in the workplace and consequently undermine collaboration, so that although IPC is essential, barriers to collaboration may make IPC difficult to practise (Robbins, 1990). These are multifactorial (Easen *et al.,* 2000; Solomon, 2010) and problems in IPC cannot be attributed to one cause.

From a physiotherapist's perspective, Solomon (2010) focused on a few challenges to IPC. These included rivalry and turf wars, concerns about liability risks and lack of evidence to support collaborative practice. The more professionals are aware of these barriers, the more can be done to overcome them. One way of overcoming barriers to IPC is by creating opportunities where professionals can learn from, with and about each other (Freeth *et al.,* 2005). Moreover, understanding the role and responsibilities of other professionals reduces mistrust and encourages IPC (Cleaver & Walker, 2004).

The coming sections will review the literature about the above mentioned challenges and others identified by other authors.

2.6.6.1 Hierarchy and power issues

In an ideal working environment, for effective collaboration to be enacted, each professional needs to be considered as an equal to everyone else (McCormack & McCance, 2011; Ness *et al*., 2014). This leads to the concept of inclusion where everyone is involved in decisions that are taken. However, "Historically, humans place professions in some form of hierarchy. This is quite evident in the medical field, with doctors, nurses, and technicians. .... [This] is a major stumbling block for collaboration." (Davoli & Fine, 2004, p. 268). The traditional medical model places the physician as the leader, followed by the allied professionals who play a supporting role (O'Connor & Fisher, 2011; Rice *et al*., 2010; Steihaug *et al*., 2016).

Professionals are rarely equal because they vary in power, authority and resources and this may make collaboration difficult to achieve (Lawson, 2004). Thus, for collaboration to be successful and effective, professionals "must be able to treat each other fairly and justly; equitable relations must prevail amid their inequalities" (Lawson, 2004, p. 230). Professionals need to identify what is lost and gained by IPC and a balance needs to be realised, preferably recognising sufficient benefits that outweigh the drawbacks (Freeth, 2001).

2.6.6.2 Professional boundaries (Turf protection)

Among several reasons why IPC may be difficult to achieve is that different professions may conceptualise their practice differently from one another (Easen *et al*., 2000; Ness et al., 2014). This may be a result of the different enculturation of the profession during the years of training (See also Section 2.6.6.5). Easen and colleagues examined front line managers working with children and families seeking services in health, education and social work. These researchers do not give much information about how participants were recruited, potentially putting the study at risk of sample selection bias. They acknowledged that the social workers were underrepresented and this may have distorted results. They also did not give much information about how data were analysed. In another study, those who experienced IPC reported that it could generate

uncertainty as to where responsibility lies, whether individually or collectively (Morrow, Malin, & Jennings, 2005).

Work on boundaries has been an issue in systems theory (Midgley, 1992) and boundaries are but constructions of socialisation that define who is included or excluded in interactions (Edwards, Daniels, Gallagher, Leadbetter, & Warmington, 2010). This, however, does not exclude individuals from pushing out the boundaries to include other professions despite the threats to exclusive expertise and professional identity (Ulrich, 1988).

2.6.6.3 Poor communication patterns

Ineffective or unsatisfactory communication among professionals in a team often contributes towards adverse events (Helmreich, 2000). These communication difficulties can occur at all levels in a hospital. Despite this knowledge, professionals continue to convey critical clinical information in an unplanned reactive manner (Lingard *et al.,* 2004). Professionals often fail to plan meetings where key issues can be discussed and often, decisions are taken without having all the significant team members present. In an ethnographic study examining communication events in the operating theatre, Lingard and colleagues (2004, p. 332) found that "Communication failures on the operating team are frequent, occurring in approximately 30% of procedurally relevant exchanges among team members" putting patients at risk. However, an encouraging finding was that these failures were caused by simple factors that could be resolved by simple measures in communication, such as adopting a safety checklist. These same authors caution that results may have been affected by sampling bias although all the team members agreeing to participate in the study counteracted this. They also caution about transferring the findings to other operating theatres and call for further research.

Medical jargon was identified as another barrier to effective communication (Davoli & Fine, 2004). Different professions accumulate a number of shortcuts to facilitate communication intraprofessionally, which may not always be clear to others, especially patients and families. This may also be interpreted as a means of maintaining power by retaining knowledge through using jargon.

2.6.6.4 Lack of understanding of one's/others' roles and responsibilities

Clarity of roles, or the lack of it, has been identified as a factor that influences the intensity of collaboration (Karam *et al*., 2017; San Martín-Rodríguez *et al*., 2005; Steihaug *et al*., 2016). In a study on family health teams, HCPs showed uncertainty in their roles and responsibilities (Goldman, Meuser, Rogers, Lawrie, & Reeves, 2010).

Other HCPs described challenges and felt frustrated when they tried to define distinctive contributions received from other professionals (Ragaz, Berk, Ford, & Morgan, 2010). Ragaz and colleagues added that professionals need to strike a balance between role clarity and flexibility in their role based on the patients' needs. Visible team care has been defined as "care in which the roles of each healthcare provider are known and understood by the patient" (Gocan *et al.,* 2014, p. 15). Gocan and colleagues, examining IPC in family health teams in Canada, concur with Doran and O'Brian-Pallas (2009) that "miscommunication and inadequate knowledge regarding professional roles resulted in patient resistance to care" (Gocan *et al.,* 2014, p. 15).

Lack of role clarity also affects professionals' thinking and behaviour by hesitating when it comes to valuing contributions made by other professionals (Davies, 2003; Hellesø & Fagermoen, 2010; Tsasis, Evans, & Owen, 2012) especially when there are competing values (Abramson & Mizrahi, 2003). On the other hand, work practices that encourage moves to flatten hierarchies where professionals collaborate within and across teams, demands that professionals "engage in discourse about their work with others, with whom they would not normally negotiate the details of their work." (Iedema & Scheeres, 2003, p. 317). This is very much in line with the findings of Karam and colleagues (2017) which sometimes entails crossing previously strongly held boundaries, leading to negotiated knotworking (Engeström, 2008b) as a response to these challenges (Bleakley, 2013; Reeves *et al*., 2010; Varpio, Hall, Lingard, & Schryer, 2008).

2.6.6.5 Divided education of individuals according to profession

The literature around IPC states that the different professions' educational system is one of the factors that determine the degree of IPC (Abramson & Mizrahi, 2003; San Martín-Rodríguez *et al*., 2005). This is because during undergraduate training, future healthcare professionals are usually socialised to adopt a strong professional identity in

their respective profession (Reese & Sontag, 2001). This strong professional identity results in individuals knowing very little about the other professions' values and responsibilities and it is considered to be one of the barriers to IPC (Mariano, 1989; Reese & Sontag, 2001). This phenomenon is most prominent in doctors and nurses who "continue to be educated in silos with little understanding of different health professionals' roles and norms, thus creating an 'us versus them' mentality" (Gardner, 2010, p. 265).

This may be why, for many years several researchers have called for educational programmes that teach collaborative practice at both undergraduate and postgraduate levels (Freeth *et al*., 2005; Johnson, 1992; Lindeke & Block, 1998). These programmes should help students appreciate other professions' roles and scope of practice, potentially encouraging IPC.

Sections 2.7 to 2.8 examine the literature relating to IPC in the paediatric setting.

2.7 IPC in Paediatric Settings

In this section, I reiterate that there is very little research on IPC in hospitalised children's settings. To overcome this limitation, I have referred to literature about IPC in paediatric settings from other fields, such as social care and social work. I will first start with some background to IPC in relation to paediatrics. Some literature from the adult healthcare setting will also be weaved into the coming sections.

Although IPC has been greatly debated in various healthcare areas (Section 2.4), little knowledge regarding this concept exists in areas where children are hospitalised (Kenny, 2002). Indeed, Reeves *et al.* (2009) highlight the positive outcomes of IPC in studies carried out in different clinical contexts such as primary care, hospice work, diabetes care and stroke care, but do not mention the paediatric setting. IPC in paediatric settings continues to be challenging and characterised by complex development processes (Horwath & Morrison, 2007). Other researchers have however identified that collaborative models are the best choice in paediatric care (Feudtner, 2007; Zimmerman & Dabelko, 2007). They claimed that collaborative communication in paediatric palliative care proved to be the foundation for problem-solving and

decision-making. IPC was also identified in an earlier study as the way forward in paediatric care (Ribby & Cox, 1997). This study was conducted in a unit for neonates and children with end stage renal disease.

The concept of IPC has moved through a journey of transition, starting from academics' inquiry of the concept, followed by politicians taking it on board and thus, influencing government policy (Kenny, 2002). IPC is in a position where it is beginning to have an effect on the structure and functioning of healthcare systems.

The United Nations Convention on the Rights of Children (1989) urges agencies to work together in the best interest of the child. However, in Malta the National Children's Policy (Ellul, Abela-Baldacchino, Borg, Miceli, & Scerri, 2016) does not specifically indicate the need for professionals to work together and there has been no legislation to introduce a Children's Act, despite Malta having ratified the UN Convention on the Rights of the Child in 1990 and promising the UN that such an act will be drawn up soon. A draft, set up by the National Commission for Child Policy and Strategy (NCCPS) is currently under review (Farrugia, 2014). For the purpose of this study, information was drawn from international documents, such as the ones by WHO, which also apply to Malta.

Although efforts to encourage IPC are laudable, it is not always easy to implement and there are potential influences that may enhance or hinder IPC in paediatric areas, as well. Influences may exist at different levels namely: organisational, interorganisational, interprofessional, and interpersonal, (Kenny, 2002; Mulvale & Bourgeault, 2007). These levels will be examined in sections 2.7.1, 2.7.2 and 2.7.3.

2.7.1 Influences at organisational and interorganisational levels

When paediatric wards form part of a general hospital, as is the situation in the practice context chosen for this study, management and clinical governance could have an adult, as well as a medical bias (Kenny, 2002) in comparison with exclusive paediatric hospitals. This bias could lead to a hierarchical or authoritarian structure (Reason, 1998) that influences relationships between professionals. However, hierarchies need not be barriers to effective collaboration (Torbert, 1991). Torbert asserts that a true hierarchy is one that encourages those in the lower levels to acquire skills in collaboration and

autonomy through transforming relationships. On the other hand, those higher up in the hierarchy are most likely to collaborate with caution as this means that the roles and boundaries are challenged and changed, thus jeopardising the autonomy of the most powerful professions (Freeth, 2001). Indeed, I argue that all levels in the hierarchy need to acquire the skills of collaboration if IPC is to be successful.

Nevertheless, organisational structures created by policy and economic factors may have a negative impact on collaborative working. This is mainly because of the cost-containment culture imposed on different professions, thus making them more inward looking "to justify their unique contribution" (Kenny, 2002, p 308) as opposed to looking outwards to other professions in a collaborative practice. Therefore, on one hand there are governmental efforts to reduce cost through IPC and on the other hand, the cost containment culture at organisational level may have a counter effect by having different professions becoming more protective of their territory and guarding their boundaries to try to prove their worth. Barr (2000) argues that the belief that collaboration is linked to economic efficiency is based on trust and not necessarily on evidence and calls for more rigorous research and evidence to support such claims. A few years after this claim, evidence emerged substantiating that IPC improves costs (Canadian Health Services Research Foundation, 2007; Safran, 2003).

In a participatory action research study, Van den Steene, Van West, Peeraer and Glazemakers (2018) scrutinised professionals participating in an innovative collaboration project in child and adolescent psychiatry. The researchers claim that at organisational level, the collaboration took time to develop, with the organisation going through a period of change in procedures and roles. After a period of inefficiency, the collaboration moved "towards more effective communication, clear joint routines and role definition" (Van den Steene *et al*., 2018, p. 5). So time was an influence. The issue of time in IPC was discussed in Section 2.6.5. The care delivered in the Van den Steene *et al.* study changed from an unplanned approach to a more proactive action with professionals' roles and responsibilities becoming clearer. Participants in their study claimed that influences such as informal and formal communication together with synchronous and asynchronous communication strengthened the collaboration (Synchronous and asynchronous communication will be discussed in Chapters Four and Five and section 9.5). A detailed account of how data were analysed and verified was

given in the Van den Steene study and the relationship between the researchers and participants was clearly stated.

2.7.2 Influences at an interprofessional level

The differences in training, knowledge, skills and values of the different professions determine how the various professions relate to and work with each other in clinical practice (Lockhart-Wood, 2000). Moreover, if any profession perceives an imbalance in the above characteristics, then this may contribute to difficulties in IPC (Henneman *et al.,* 1995). Indeed, professionals may find IPC at this level overwhelming and may lead to some individuals moving on to other jobs (Van den Steene *et al*., 2018). Clarity of professional identity and role may help the transition to become a collaboration.

Other influences on IPC at this level have been identified as being professional hierarchies, patterns of socialisation which are discipline-specific, and not enough time for team building activities (Pethybridge, 2004). Professional values can be an area where interprofessional learning can occur (Glen, 1999). Although the different stances taken by the various professions can be of benefit for a more comprehensive patient care plan, this may also create conflict in patient management (Kenny, 2002). However, Scott (1999) suggests that if the different professions align their values towards one that is agreed upon, then everyone can own collaboration. Moreover, when different professions work together interprofessionally, they are bound to empower each other especially in issues related to child health (Warne, 1998). This creates professional confidence, an issue that may be considered as an antecedent to IPC (Lockhart-Wood, 2000) (See Section 2.6.4). Learning can also occur in aspects of IPC, such as interpersonal and communication skills in relation to professionalism and their impact on interaction between healthcare professionals (Balmer, Richards, & Giardino, 2010, p. 372). These two aspects of IPC are interrelated and indeed, support professionalism (Chakraborti, Boonyasai, Wright, & Kern, 2008).

2.7.3 Influences at an interpersonal level

History has shown that children's care had been marginalised until Court's report about the UK Department of Health (Court, 1976) which established that paediatric nursing was a speciality and which highlighted the importance of interprofessional working to meet the complexity in childcare. At an interpersonal level, IPC very much relies on the

day-to-day interactions between individuals (Allen, 1997; Cott, 1998; Ellingson, 2003; Kenny, 2002; Reeves *et al*., 2009; Van den Steene *et al*., 2018). Moreover, a change in attitudes towards IPC and getting to know colleagues in the collaboration were considered to be core elements for successful IPC on an individual level and, one element supported the other (Van den Steene *et al*., 2018). This process of getting to know one another and communicating through formal and informal interactions enabled working together and the development of the day-to-day routine.

Thus, effective communication can be considered an important antecedent to collaboration (Henneman *et al.,* 1995) together with good skills to help enhance the qualities of trust and respect (Strong *et al*., 2012). If these qualities are not addressed, then working practice will continue to be dominated by issues of status, class and gender (Kenny, 2002). Actually, Cott (1998, p. 870) observed that those professionals who participated in her study, "[do] not share understandings of roles, norms and values, [and besides this, they also] do not share similar meanings of teamwork." She attributes this disparity to professional affiliation but also to the structural position in the team. Cott explains that this depends on how involved they were in the team where "the structure of the team refers to the patterns of relationships amongst team members that underlie the organisation of the team" (Cott, 1998, p. 850). Cott asserts that individuals were placed lower in the structure of the team when they were rarely involved in the team, such as in the case of health assistants who may be disenfranchised. This may also be due to the hierarchical structure of the team that might isolate those in lower positions resulting in having different meanings of teamwork. When there are few interactions among health professionals, as might happen to those left out of the team, this interferes with interpersonal sentiments and discourages collaboration among the team (Cott, 1998).

2.8 Scope and Quality of IPC Literature in Paediatric Settings

IPC within a paediatric setting will be discussed further in the next sections. Reference will be made to studies, which examined areas where children are hospitalised, and other areas in health and social care.

2.8.1 Translating policy into practice and practice into policy

Having official documents promoting and enforcing IPC is not enough (Nijhuis *et al.,* 2007). A list of policy makers and professional bodies has been given in Chapter One and they propose several policies regarding IPC. Studies that have already been discussed and others that will be discussed in the coming sections, show that IPC requires more than policies to be practised.

Although on a national level various guidelines were clear, the five Dutch paediatric teams examined by Nijhuis and colleagues (2007) (See Table 2.6) revealed that the actual thinking about collaboration between the centres and parents differed both at the institutional and at child level. This indicates that official documents, although helpful and a promising starting point, are not enough to translate policy into practice. Indeed, Nijhuis and colleagues highlight the need to translate the commitment to collaboration into practical guidelines and protocols that define team procedures and guarantee team members' involvement. In the settings where policies were not translated into protocols, professionals and parents were not clear on their role and function in the team and this led to many of the professionals not turning up for scheduled meetings. This behaviour may be due to these meetings not being compulsory for the team members and a whole host of logistical and service need constraints that make it very difficult for people outside the core team to attend these meetings. Literature pertaining to MDT meetings will be discussed in Section 2.8.2.

In contrast to the above findings, the study by Thylefors *et al.* (2000) (See Table 2.6) conducted in a similar setting in Sweden showed that similar meetings were more productive; however, policies in this context required that attending such meetings was compulsory for the professionals caring for the child although not for the parents. Although Thylefors and colleagues (2000, p. 528) stated, "Team work in Swedish paediatric rehabilitation services developed spontaneously and not as a result of a conscious implementation of a single formula," legislation regarding the required services for such children had been in place since the 1950s. Over the years, this may have encouraged professionals to work collaboratively to provide such services. The aim of this mixed method study was to describe current teamwork in Swedish neuro-paediatric rehabilitation through an analysis of the perception of seven different

professions covering all counties in Sweden. The majority of this paper focused on the data from the questionnaires and this somehow overshadowed those from interviews.

Table 2.6 Studies in paediatric settings

Study	Design and Theoretical framework	Setting	Method/s	Sample	Findings
Crowley, A.A. & Sabatelli, R.M. (2008). Collaborative Childcare Health Consultation: A conceptual Model	Qualitative: Grounded theory (part of a mixed method study). Symbolic interactionism, role theory, and identity bargaining.	Child care centres.	Semi-structured, in-depth interviews (following a questionnaire survey).	10 pairs of child care centre directors and health consultants (out of a 100 pairs who responded to the questionnaire).	Developed a conceptual model for collaborative child care health consultation based on symbolic interactionism. Four main themes were identified as helping to develop the model: Open communication, comprehensive commitment, mutual respect, and congruent philosophies.
Eilertsen, M-E. B., Kristjansen, K., Reinfell, T., Rannestad, T., Indredavik, M.S., & Vik, T. (2009). Professional collaboration, support for children with cancer and their families, focus group interview, a source of information and knowledge, professionals' perspectives.	Qualitative	Paediatric oncology in Norway. In hospital and the child's home community	Focus group interviews	9 professionals from the community and 14 from hospital (n=23) were chosen, 18 turned up.	The Professional Collaborative model (PCM) was considered 'a valuable support system' for all chronically ill children. Support for the professionals was minimal and some felt isolated. Well established routines and structure can contribute to IPC.

Table 2.6 Studies in paediatric settings (cont.)

Study	Design and Theoretical framework	Setting	Method/s	Sample	Findings
Inkila, J.; Flinck, A.; Luukkaala, T.; Astedt-Kurki, P. & Paavilainen, E. (2013). Interprofessional collaboration in the detection of and early intervention in child maltreatment: employees' experiences.	Cross-sectional survey.	A basic group of daycare, basic education, social services, healthcare and police personnel in Tampere, Finland.	Development of an instrument through an eight page questionnaire.	1959 employees from the settings already mentioned.	Women were more accepting than men of the various perspectives of other agencies. Social services employees and police personnel best accomplished IPC. Employees in day care, basic education, health services and police had little knowledge of the methods used in other units. The most support for IPC was reported by employees in social services and day care.
Nijhuis. B.J.G., Reinders-Messelink, H.A., de Blecourt, A.C.E., Olijve, W.G., Haga, N., Groothoff, J.W. et al. (2007). Towards integrated paediatric services in the Netherlands: a survey of views and policies on collaboration in the care for children with cerebral palsy	Qualitative: Textual analysis.	Five centres for the rehabilitation (RCs) and schools for special education (SSEs) for children with cerebral palsy (CP) in the Netherlands.	Reviewing of associated documents related to collaboration and compiling an overview of the type and number of active team members.	83 professionals from the RCs and 89 from the SSEs. (5 settings in all, parents of 44 children consented)	Multi-disciplinary team conferences crucial in all 5 centres. Using structured communication (Rehabilitation activities profile-RAP tool). Despite official documents at national level promoting IPC, discrepancies were found at institutional and child level. Large teams can hinder collaboration and make it harder for parents to communicate with.

Table 2.6 Studies in paediatric settings (cont.)

Study	Design and Theoretical framework	Setting	Method/s	Sample	Findings
Nutall, J., (2013). Inter-professional work with young children in hospital: the role of 'relational agency'	Qualitative	Hospitalised children in the UK	Work shadowing and interviews	Seven hospital play specialists	Participants were able to clearly articulate their core expertise and identify the motives underlying the work of a range of other professionals.
Ødegård, A., (2005). Perceptions of interprofessional collaboration in relation to children with mental health problems. A pilot study.	Qualitative	Child mental health services in Norway	Semi-structured interviews in combination with a vignette and Sentence completion technique.	Seven professionals	Participants perceived individual factors as influencing interprofessional groups. This required that professionals understand individual differences and that each individual will have their own construction of reality.
Ødegård, A., (2006). Exploring perceptions of interprofessional collaboration in child mental healthcare	Quantitative	Child care services including primary care, specialist services and elementary schools in Norway	Questionnaire (PINCOM-Q)	134 professionals	Central aspects of IPC in the context of service delivery and case work are - interprofessional climate, organisational culture, organisational aims, professional power, group leadership and motivation.
Ødegård, A., (2007). Time used on interprofessional collaboration in child mental health	Quantitative	Children's mental health in Norway	Focused on two questions from the PINCOM-Q.	134 professionals	Professionals on average use 40% of their time on collaboration activities especially with professionals from their own organisation.

Table 2.6 Studies in paediatric settings (cont.)

Study	Design and Theoretical framework	Setting	Method/s	Sample	Findings
Ødegård, A., & Strype J., (2009). Perceptions of interprofessional collaboration within child mental healthcare in Norway.	Quantitative	Outpatients' children's mental health in Norway.	PINCOM-Q	157 professionals	Motivation, group leadership, social support and organisational culture were perceived as the most prominent construct at all levels.
Rousseau, C., Laurin-Lamothe, A., Nadeau, L., Deshaies, S., Measham, T. (2012). Measuring the quality of interprofessional collaboration in child mental health collaborative care.	Quantitative (Pilot study)	Three health and social service centres in Montreal, Canada.	Survey using two questionnaires	96 respondents of the 165 approached (professionals)	The PINCOM-Q and the ECD-P scales had an excellent internal consistency and were moderately correlated. Child mental health professionals' individual aspects and scores were better than other child professionals.

Table 2.6 Studies in paediatric settings (cont.)

Study	Design and Theoretical framework	Setting	Method/s	Sample	Findings
Thylefors, Price, Persson & Wendt (2000). Teamwork in Swedish neuropaediatric habilitation.	Mixed methodology. Paper focused mainly on quantitative results. Found no follow up.	Swedish neuropaediatric habilitation team meetings.	Survey, group interviews, individual interviews	Survey: 1 representative of each profession from all 35 rehabilitation units selected n=202 professionals. Group interviews: Six teams randomly selected and representing all seven professions. Individual interviews: all who participated in group interviews (n=40)	Team cooperation based on meetings (10 hours per person per month). Lack of time considered as a serious obstacle, followed by poor meeting discipline, too large a group, punctuality, and professional language. Vast majority felt they were listened to. Physiotherapists and paediatricians perceived as dominant groups.
Willumsen, E. & Hallberg, L., (2003). Interprofessional collaboration with young people in residential care: some professional perspectives.	Grounded theory	Residential care in Norway	Interviews	23 professionals from two institutions	Establishing "readiness to act" was the core category identified which was dependent mostly on the individual's capability to contribute to IPC. An apparent contradiction between health and social policy that encourages the standardisation of services. Extensive use of flexibility and willingness to go beyond boundaries.

Table 2.6 Studies in paediatric settings (cont.)

Study	Design and Theoretical framework	Setting	Method/s	Sample	Findings
Willumsen, E. (2006). Leadership in interprofessional collaboration – the case of childcare in Norway.	Qualitative exploratory and interpretive design.	Norwegian childcare services	Interviews	Six managers	Related to communication structures and how the managers needed to facilitate interaction to ensure cohesion. The formation of images and influencing the voluntary aspect of interaction processes

2.8.2 The role of multidisciplinary team meetings

IPC is at times achieved during multidisciplinary team (MDT) meetings. These are crucial for clinical decision-making. Studies highlight the various benefits of these meetings, such as having structured communication among professionals (Nijhuis *et al.,* 2007) and team cooperation (Thylefors *et al.,* 2000).

Nijhuis and colleagues (2007, p. 601) approached IPC by examining written statements of professional associations in the Netherlands. This textual analysis study showed that "an integrated, coordinated service plan plays a central role in paediatric team collaboration." The documents included in the textual analysis were written statements of professional associations in Dutch paediatric rehabilitation; policy statements from institutional files; and documents detailing the collaborative arrangements of the various professionals and parents based on team conferences.

Nijhuis and colleagues (2007) investigated current views on team collaboration of professionals working in neuropaediatric rehabilitation in five collaborative settings. The study describes the collaborative arrangements between the services and the parents at the institutional level and at the child's level by examining the practices of the child-tailored teams. Besides the data generated from the analysed documents, data were also sought to gain insight into the composition of the teams by compiling an overview of the type and number of active team members, relying heavily on secondary sources. Data relied on secondary sources of both documents and participants. Different, richer data might have been generated had the researchers directly *observed* the team conferences, this may have been more appropriate to answer the last of their four research questions of the study which focused on the nature of involvement of the professional team members in the collaboration.

Thylefors and colleagues (2000) reported that team cooperation in Swedish rehabilitation is based on MDT meetings. Having said this, family members were not included as part of the team in this study. Although parents were invited for consultations before and after the case conference, they were not included on a partnership basis, which might have changed the dynamics of the teams (This is almost similar practice in my study setting).

2.8.3 Understanding each other's roles

Recognising the standpoints of other professionals is highly important for the success of IPC (Nuttall, 2013; Ødegård, 2005; Remke & Schermer, 2012). Perceptions at group and organisational levels need to be identified. These include the importance of accepting all contributions towards IPC, irrespective where they are coming from. This is not always easy as IPC may be difficult to achieve. As shown in Table 2.6, Nutall's (2013) study was conducted with hospital play specialists (HPS) working with hospitalised young children. This study revealed that the setting was rife with power differences and that interprofessional work was difficult to achieve. Finding a balance between "upholding children's rights as patients, and successful treatment" (Nuttall, 2013, p. 422) was however sometimes achieved because some HPSs were assertive about their expertise and applied relational agency.

Nutall (2013), shadowing each individual participant for half a day during their normal duties, collected data by ending the session with a half hour discussion. Nutall used Edwards' (2009) concept of 'relational agency,' that is, the capability of working with other professionals (in this case the HPSs and other health professionals) by realising the motives and resources that others bring with them (relational agency). Relational agency also includes the development of common knowledge. Participants were able to clearly articulate their core expertise and identify the motives underlying the work of a range of other professionals. These findings were not clearly stated and the discussion section had to be read several times to bring findings to the foreground.

2.8.4 Hierarchy and status

The tension between calls for patient care to be delivered collaboratively and the actual implementation of IPC has been widely researched (Nugus, Greenfield, Travaglia, Westbrook, & Braithwaite, 2010). One possible hindrance to IPC implementation is: "the nature of each stakeholder group's involvement and the roles and responsibilities of each team member in the various interactions, factors that are needed to optimise team interactions ..." (Nijhuis *et al.,* 2007, p. 602).

Thylefors *et al*. (2000, p. 530) found that the stability of the team in their study was attributed to the finding that "the professionals were fairly equal in status" and that in general all the team members' views were acknowledged. Despite this, one third of the

team did not feel comfortable in questioning or challenging the other professions. They attributed this to conflict avoidance behaviour or perhaps to lack of time to do so. Paediatricians and physiotherapists were seen as the most dominant groups in most situations; however, Thylefors and colleagues concluded that since the four main "cornerstones" in Swedish rehabilitation were represented, namely, medicine, psychology, education and social support, then contemporary Swedish rehabilitation was considered to have a stable nucleus of professionals. This level of collaboration was found across all teams across Sweden.

Thylefors and colleagues (2000) also challenged the issue of sex distribution within this context. Since other authors, such as Boalt Boëthius (cited in Thylefors *et al*., 2000) noticed a less dominant hierarchical structure when the team was mostly composed of females, Thylefors *et al.* declared that this may be the reason why there was an egalitarian professional relationship. Of the 172 professionals involved, 90% were female. The less dominant hierarchical structure, could also result from females being more accepting than men of the various aspects of other professionals (Inkilä, Flinck, Luukkaala, Åstedt-Kurki, & Paavilainen, 2013) (See Table 2.6).

Inkilä and colleagues (2013) conducted their study by depicting IPC associated with detection and early intervention of child maltreatment in Finland. They gathered data by administering an eight-page questionnaire aiming to gather information for developing practices of those involved in detecting and intervening in child maltreatment. They found that social service employees and police personnel were best at IPC in this sector with less hierarchy. Moreover, employees' individual and positive attitudes and willingness to collaborate were factors that affected IPC, findings that resonate with D'Amour, Ferrada-Videla, Rodriguez and Beaulieu (2005), Ødegård (2007), and Willumsen and Hallberg (2003).

2.8.5 Paediatric IPC research in the Norwegian context

Two widely quoted researchers that have contributed to knowledge about IPC in paediatrics are Willumsen with her work in areas for childcare services (Willumsen & Hallberg, 2003; Willumsen, 2006; Willumsen, 2008), and Ødegård, studying areas for children with mental health problems (Ødegård, 2005; Ødegård & Strype, 2009;

Ødegard, 2007; Ødegård, 2006). All these researchers work within the Norwegian context.

The studies conducted by Willumsen (2006) and Willumsen and Hallberg (2003) (More details given in Table 2.6) both use interviewing as a method of data collection. The main theme that runs through these studies is that of the importance of interaction in IPC and the readiness of individuals to do so while acknowledging that there are different levels of collaboration.

Using a grounded theory approach, Willumsen and Hallberg (2003, p. 389) explored "professionals' contributions to IPC and attempted to grasp a sense of the wholeness of the collaboration process." A detailed account of how data were rigorously analysed was given in the paper and respondents and peers validated credibility of findings. Analysis defined five categories regarding the professionals' contributions to the success of IPC. Establishing "readiness to act" was the core category identified which was dependent mostly on the individual's capability to contribute to IPC. Later, Willumsen (2006, p. 405) (More details in Table 2.6), using an exploratory and interpretive design as part of a larger project, explored managers' perspectives with special focus on how they exercised leadership in childcare services and "how they organised and facilitated collaboration with professionals and service users."

Despite the focus was on leadership, Willumsen (2006) also shed light on collaboration. Although the researcher explained who the participants selected were, there was no discussion around it and why these particular participants were chosen, potentially leading to selection bias. Details of how interviews were conducted were given, but there was no discussion regarding saturation of data. Willumsen also did not mention critically examining her role for potential bias during data collection and analysis.

One of the main findings was related to communication structures and how the managers needed to facilitate interaction to ensure cohesion. The managers interviewed mainly used shared-governance and encouraged individual autonomy. They linked these concepts to why leadership is interrelated with collaboration. Willumsen (2006) acknowledges the study's limitation due to its small sample but asserts that the

participants' statements were rich, ensuring validity of the data. However, very few data excerpts were presented in the paper and so this richness could not be verified.

Ødegård, on the other hand, based her studies on IPC around child mental health. Ødegård's (2005) study (See Table 2.6) was a pilot study to attempt to outline a model of IPC. The aim of the study was to explore how professionals perceived IPC in the child mental health context and how to design a main study. Participants ranged from teachers, psychologists and a medical doctor. A qualitative approach was employed. Data were generated through vignettes, the written sentence completion technique, followed by interviews. The reason why I chose to include this pilot study was because of the scarcity of empirical studies in paediatric IPC and which, on appraisal, was found to have followed a rigorous process. Having said this, the researcher did not mention her relationship to the participants, which may have resulted in potential bias in data collection and analyses. Another flaw was that no ethical considerations were mentioned in the study. Participants perceived individual factors as influencing interprofessional groups. This required that professionals were able to understand individual differences and that each individual would have their own construction of reality. Results from this study need to be interpreted within the limitations set by being a pilot study with a small sample.

In another paper, Ødegård (2006) (See Table 2.6) devised a theoretical model (PINCOM: Perception of Interprofessional Collaboration Model) to measure mental health and school professionals' perception of IPC. This tool was based on twelve constructs derived from the earlier pilot study. The main aim of this tool was to capture crucial aspects of IPC. The development of the PINCOM-Q (questionnaire) was an attempt in measuring professionals' perceptions of IPC. A quantitative design was employed and revealed that the crucial aspects of IPC include interprofessional climate, organisational culture, organisational aims, professional power, group leadership, and motivation. Findings were clearly stated and presented in tables and discussed in-depth. However, Ødegård admitted that one of the major limitations to her study was the use of convenience sampling and therefore, results are to be interpreted with caution.

This same questionnaire was later used in a pilot study to determine its usefulness when used together with another tool, the Satisfaction with Decision Scale (ECD-P) [initials

of French version]. These two tools were used "to establish the psychometric characteristics ... to study the association between the two scales; and to compare the scores of the two instruments" in children's mental health settings (Rousseau, Laurin-Lamothe, Nadeau, Deshaies, & Measham, 2012, p. 3) (See Table 2.6). These researchers found that both tools showed good internal consistency when used in their chosen setting. The moderate correlation found between these two tools emphasizes that they measure different aspects of partnership and are useful to use together to evaluate the quality of collaborations. However, the latter was a pilot study and the small sample size and relatively low response require that these findings to be interpreted with caution.

Another paper by the same author (Ødegard, 2007) (See Table 2.6), presented results from two questions included in the PINCOM-Q that focus on how much time individuals spend in IPC during a regular working day. The sample included professionals involved in child mental health and ranged from teachers, psychologists, social workers and medical doctors, among others. Results showed that "collaboration is a major activity for professionals within child and adolescent mental healthcare." (Ødegard, 2007, p. 51). Ødegård found that professionals spend at least 40% of their working hours on collaborating with colleagues. However, Ødegård did not include the time spent on asynchronous IPC, such as reading and writing a report. Indeed, information about asynchronous IPC in general is lacking in literature, a gap that this study aims to address. Had Ødegård included such activities, the percentage might have been higher. She acknowledges this when she asserts that part of the other 60% of the time was still relevant to IPC but does not identify how. Results also depended on the professional's understanding of what collaboration is.

In another paper, Ødegård and Strype (2009, p. 288) (See Table 2.6) explored, "what professionals perceive as the prominent aspects of IPC ... and assess central perceiver characteristics that seem to influence perceptions of IPC." This time, the sample, which was rather small (n=134 of the 157 who were approached), consisted of professionals working with children with mental health problems attending outpatients. The PINCOM-Q, which is a self-report tool, was used. It measures subjective perceptions of 12 constructs operating at three different levels (individual measures, group measures and organisational measures) with four indicators for each level, 48 items in all.

Analytical methods were clearly described; using descriptive statistics and the use of tables enhanced analysis description. Results that were presented in sufficient detail showed that motivation, group leadership, social support, and organisational culture were perceived as the most prominent constructs at all levels.

Therefore, the themes related to IPC that were studied in Ødegård's work were mainly focused on the professionals' perceptions of IPC and what determinants influenced IPC, thus capturing crucial aspects of IPC. Indeed, together with other researchers, she developed the PINCOM-Q tool to measure the perceptions of IPC. Ødegård also emphasised the multiple realities of what IPC may mean to each individual and how for IPC to be successful, professionals need to accept all contributions from all professions. This why, in my study, I have included all healthcare professionals working in the setting. By analysing answers from two questions in a previous questionnaire, Ødegård focused on the time professionals spent in synchronous IPC but also acknowledged that she did not measure the time spent in asynchronous IPC, an aspect of IPC that is discussed in my study (See Chapter Five). Data in these studies were mainly generated through interviews, written completion of sentence technique and questionnaires. In contrast, my study aims to shed light on IPC in paediatrics and add to its knowledge by using the method of ethnographic participant observation besides interviews.

Another setting studied in the Norwegian context is that of paediatric oncology. A set of researchers aimed to evaluate the Professional Collaboration Model (PCM) and to explore professionals' perceptions of collaboration in general (Eilertsen *et al*., 2009) (See Table 2.6). The sample included 18 participants from health and non-health professions, working in the hospital paediatric department or in the child's home community. This small sample size and the fact that only three focus groups were held could be considered as a limitation to this study. However, having an independent and experienced moderator leading the groups and another independent person who transcribed the data could have strengthened the study. These researchers also analysed data independently.

The main finding was that "professionals perceived the PCM as being a valuable support system" (Eilertsen *et al*., 2009, p. 362) which not only acted as a support for children suffering from cancer and their families but also helped in long-term follow-up

care and may be used for other chronically ill children. For this to happen, there needs to be a well-structured collaboration between professionals. In fact, the professionals in this study felt that they did not receive enough supervision for collaboration from the team, which they considered as an important support system (Eilertsen *et al*., 2009). Indeed, they argued that this could lead to a lack of self-confidence, an issue that was also raised by Kenny (2002) (See Section 2.6.4). On the other hand, Inkilä and colleagues (2013) found a significant association between the field of employment and receiving support for collaboration. They argue that the longer the time the professional spent with children, the more support they gained mainly from their supervisor and the professional's own unit.

Three of the researchers from the previous study (Eilertsen, Reinfjell, & Vik, 2004) had already previously evaluated the PCM, but this time through conducting a questionnaire. Health and non-health professionals working with oncology children from the families' home communities also participated in this study. Findings showed that participants valued the collaboration involved in the follow-up care of these children and that it had value for these children, their families and the professionals, as well. The researchers also acknowledged that there were areas where the model could potentially be improved.

2.8.6 IPC in other paediatric contexts

Four critical and interrelated themes namely; open and active communication, comprehensive commitment, mutual respect, and congruent philosophies and values were considered as contributing factors to a collaborative relationship (Crowley, & Sabatelli, 2008) (See Table 2.6). Moreover, trust and understanding promoted a collaborative relationship expanded role, whilst mistrust and misunderstanding resulted in a conflicted relationship limited role. Adopting a grounded theory design, Crowley and Sabatelli developed a collaborative childcare health consultation conceptual model. Their aim was to explore "the nature of consultation between childcare centre directors and health consultants" and to identify "factors that promote or inhibit a collaborative relationship." (2008, p. 76). They used symbolic interactionism as a theoretical framework, and role theory and identity bargaining as conceptual frameworks. Data were generated through in-depth interviews. Although details of how participants were recruited were clearly defined, the researchers did not specify their relationship with the

participants leading to potential data collection and analysis bias. However, a detailed description of how data were analysed was given, using a constant comparative method.

In an interpretative phenomenological analysis approach, Collins and McCray (2012, p. 135) looked at "practitioner's understandings of their role and partnership in a new education, health and social care context." They concluded that despite the evidence of the link between poor IPC and child tragedies, "Working together is not as yet the inclusive, co-operative process envisaged in policy ... and this calls into question the capacity of practitioners to deliver services for children and young people within existing structures." (Collins & McCray, 2012, p. 139).

The next section will discuss the theoretical perspectives used to illustrate IPC in general and briefly discuss how different authors contributed towards understanding IPC through different lenses.

2.9 Theoretical Perspectives that Illustrate IPC

In Willumsen (2008, p. 362) a selection of theoretical approaches were presented that shed light on IPC in children's welfare activities. These theories included theory of contingency and concepts of differentiation and integration. Willumsen produced a reflection model, representing different levels of interpersonal and inter-organisational integration to help individuals understand IPC better. She asserts that this model can also be used in "identifying structures and relationships, as well as the implications [for IPC] ... in terms of opportunities and limitations." (Willumsen, 2008, p. 362).

In an ethnographic study of a geriatric oncology team, Ellingson (2003) used Goffman's (1959) theory of backstage and frontstage (See section 3.4). Ellingson explored the backstage communication processes of the team and concluded that backstage communication, especially that carried out "outside of formal team meetings", was crucial for "internal team functioning" presented when frontstage (Ellingson, 2003, p. 114). She also envisaged backstage work research as becoming more prominent in health research as researchers realise how important this work is.

In another ethnographic study, Lewin and Reeves (2011) scrutinised interprofessional practice in a general and emergency medical directorate, by also utilising Goffman's (1959) theory but this time also using the concept of impression management, together with Sinclair's (1997) version of Goffman's frontstage and backstage model. Lewin and Reeves' (2011, p. 1602) findings also included that interprofessional interactions were often based on the *ad hoc* backstage activities. Similar to Ellingson's findings they also highlighted, "that ownership of space, as well as the fluidity between front and backstage spaces and the types of activities which occurred within these spaces, were important to understanding interprofessional work in this context." (This will be discussed in Section 9.2.3).

Reeves and Lewin (2004, p. 221) had already scrutinised IPC in another healthcare setting. Employing an ethnographic method, they studied medical wards in a large teaching hospital where they found that IPC "consisted largely of short, unstructured and often opportunistic interactions." They claim that these interactions evoked notions of "knotworking" (Engeström, 2008b, p. xi) (See section 2.6.1) which was a more useful description of the kind of collaboration that occurred in their setting than the usual notions of teamwork.

In another ethnographic study, Hurlock-Chorostecki and colleagues (2015) also used Engeström's (2008b, p. xi) concept of "knotworking." They examined how nurse practitioners (NP) working in six purposefully selected hospitals and long-term care facilities enacted IPC and care. The NPs' interactions were specifically explored within the context of "knotworking." These researchers found that "Brief interactions reveal new qualities of knotworking with more consistent interprofessional care results." (Hurlock-Chorostecki *et al*., 2015, p. 1). The researchers distinguished between traditional (rapid) knotworking and brief knotworking that is more synchronised and integrated, resulting in IPC.

In 2013, Hall and colleagues claimed that for the previous twenty years, they had explored various theories which they 'weaved' together to help them develop successful IPE programmes and significant interventions to increase IPC. They drew on several theories that they deemed appropriate in further developing their programmes incrementally and consequently influence IPC in practice. My intention here is not to

reproduce their list of theories and their impact. They aptly listed them in a table in their article (Hall, Weaver, & Grassau, 2013, p. 74), but mentioning them as part of this section is important, as other researchers investigating IPC have used most of them. The theories they drew upon were:

- Professional Socialisation and Boundary Work (Petrie, 1976; Witz, 2013);
- Models for Group Processes (Tuckman & Jensen, 1977);
- Activity Theory and Knotworking (Engeström, Engeström, & Vähäaho, 1999; Engeström, 2001);
- Tension Triangle (Illeris, 2003);
- Reflective Learning (Schön, 1984);
- Situation Awareness (Mackintosh, Berridge, & Freeth, 2009)
- Scaffolding the Social Domain of Learning (D'Eon, 2005);
- Actor Network Theory (Akrich, Callon, Latour, & Monaghan, 2002; Bleakley, 2006; Latour, 2005)-
- Complexity Theory (Davis & Sumara, 2014; Heylighen, Cilliers, & Gershenson, 2007; McMurtry, 2010);
- Feminist Relational Theory (Brown & Gilligan, 1992; Gilligan, Spencer, Weinberg, & Bertsch, 2003).

Hall and colleagues (2013, p.78) suggest that HCPs draw upon and "integrate multiple perspectives" which they have collated in a "toolbox" to address challenges that require collaboration while being "flexible and creative" (2013, p. 79). They also acknowledge that the toolbox keeps evolving as other researchers test other theories in exploring IPC.

In January 2013, The Journal of Interprofessional Care also dedicated a whole issue to how theory helps in understanding the nature of interprofessional education (IPE), practice and care. In the editorial, Reeves and Hean (2013, p. 1) assert that theories "help to illuminate different aspects of a phenomenon and provide a framework for understanding them." They then introduce the studies in the same issue that were mostly examining IPE but also IPC which I will discuss next.

In a scoping review, Suter and colleagues (2013, p. 5) explored the use of systems and organisational theories and claim that these two theories are "underrepresented in the

literature." They identified a number of theories which other authors had previously used and some which were not previously employed. Systems and organisational theories ranged from Systems Theory (Von Bertalanffy, 1971) to Learning Organisation (Senge, 1990). Indeed, these are the two theories I employed in my Master's thesis (Cini, 2007). Among other claims, Suter and colleagues (2013, p. 6) assert, "some of these theories elaborate how organisational context and structures within an organisation can impact collaboration and practice change."

Other authors, such as Thistlethwaite and colleagues (2013), chose to contribute by writing about the origins of a community of practice, IN-2-THEORY, to build theoretical rigor in interprofessional education and collaborative practice (IPECP). This group worked together to raise the theoretical profile within interprofessional research, policy, and collaborative practice (Hean *et al.,* 2009). Drawing from other researchers, the IN-2-THEORY group propose seven principles for further developing this community of practice which are; "design for evolution; open a dialogue between inside and outside perspectives; invite different levels of participation; develop both public and private community spaces; focus on value; combine familiarity and excitement and create a rhythm for the community." (Wenger, McDermott, & Snyder, 2002, p. 2).

Other theories and conceptual frameworks utilised by studies discussed before included symbolic interactionism, role theory and identity bargaining (Crowley & Sabatelli, 2008). Willumsen (2008, p. 362) presents a selection of theoretical approaches that shed light on IPC in children's welfare activities. These theories included the theory of contingency and concepts of differentiation and integration. Nutall (2013) used Edwards' (2009) concept of relational agency, that is, the capability of working with other professionals (in this case the HPSs and other health professionals) by realising the motives and resources that others bring with them.

2.10 Conclusion

While reviewing the literature that relates to IPC in the adult settings, I identified the several forms that collaboration might take. This led to organising the benefits and the importance of IPC (such as patient safety) and identifying the factors that positively or negatively affect IPC (such as relationships, communication and hierarchy). The

fulcrum of this chapter was the review of the literature pertaining to IPC in paediatric settings and it was brought to a close with a brief overview of the theoretical perspectives that show insight into the literature on IPC.

It is worth noting that the reviewed studies pertaining to paediatric IPC, mostly relied on seeking the perceptions of different professionals on the subject of IPC through questionnaires, interviews, or focus groups. Part of my data corpus was generated through ethnographic participant observation in an attempt to address the lack of observational studies which is a gap in the literature. My study also aims to generate more understanding of the complexities in communication and its constituent acts of information exchange by looking at IPC through the lens of 'scriptedness.'

Another gap in the literature which I hope to address is the interplay between synchronous and asynchronous collaboration. Therefore, by examining IPC in a paediatric in-hospital setting where literature is lacking, the aim of this study is to answer the question of how IPC is enacted in this paediatric setting.

Chapter 3 Methodology and Methods

3.1 Introduction

This chapter illustrates the methodological framework used to address the aim of this study presented in Section 1.3. It starts with examining the epistemological and ontological background of constructionism and the theoretical perspective of symbolic interactionism that informed this study.

Goffman's (1959) social dramaturgical theory, with its special focus on scripts, helped to give insight on IPC in this setting. This will also be discussed in this chapter, followed by a discussion around ethnography and the methods of data collection. Principles based on ethnographic methods, which have guided the methodological decisions taken and how data were analysed, will then be discussed and ethical issues addressed. A section on reflexivity will follow.

The chapter concludes with an introduction to the steps taken to ensure methodological rigour and quality in this study, which will be further discussed after the findings' chapters have been presented in Section 9.9.

3.2 Constructionism, ontology and epistemology

Constructionism is the belief that knowledge relies on humans interacting with their world in a social context and therefore for that person, this knowledge is reality (Crotty, 1998, p.42). Moreover, constructionists believe that truth and meaning are constructed when we interact with the realities in our world. Despite having the potential for several meanings, such realities only become meaningful when we become conscious of them. Indeed, Crotty (1998, p. 8) asserts that things have no meaning unless there is a mind to think about them. Furthermore, each one of us may apply different meanings to a particular phenomenon. Therefore, meanings are constructed humanly and can be understood through an interaction between the researcher and the researched. Consequently, meaning or truth is constructed from something that already exists in the world.

Guba and Lincoln (1998) assert that constructionism differs mostly from the other paradigms in its ontological stance. Ontology is the study about the nature of reality, of what there is. The ontological stance in constructionism is that of being relativist, that is, the belief in the existence of not just one reality, but of multiple realities which are socially constructed and may be altered by the knower (Crotty, 1998; Laverty, 2003). Moreover, these realities are not representing one truth but informing new constructions through reconstructions. Thus, constructions and their associated realities are alterable. Having the possibility to change, these constructions are open to interpretation and subjectivity, potentially presenting more than one reality. As the researcher in the study being presented, I interpreted the studied phenomenon and thus may not have achieved "parsimonious explanations and generalisations devoid of context" (Charmaz, 2008, p. 402). My perspective of the world, influenced the observations and views I formed and also my interpretation of data. This is why I gave importance to reflexivity, which will be discussed in Section 3.10.

Crotty (1998) argues that social constructionism can be realist, as well as relativist. Something that is socially constructed does not necessarily mean that it is not real (Fish, 1990). Although, Crotty also urges us to accept that social constructionism is relativist in nature and thus, we need to hold our understanding of phenomena more tentatively. Constructivists try to understand the complexity of the world through the lens of others' lived experience by showing concern for the 'emic' point of view, thereby capturing the participants' understanding of a situation (Schwandt, 1998).

This is what I aimed to do when I adopted constructionism and relativism. Indeed, the constructivist needs to understand and interpret the meanings that participants portray through their actions and in their language. Therefore, there is no one truth or one interpretation but several interpretations, which may be useful, liberating, fulfilling, and rewarding (Crotty, 1998). However, this may also be a problem for research, especially for those who are looking for one truth. Furthermore, constructionism takes serious account of the object in the world, it is always open to the world, giving importance to both the subject and the object and never allowing one to overpower the other (Adorno, 1990). Thus, both researcher and participant are important in constructing meaning.

Constructionism entails that we do not remain within the constraints of the meanings we have been taught to attach to an object. Instead it encourages us to go beyond that and to openly look for a richer meaning through reinterpretation (Crotty, 1998). On the other hand, constructivism has an individualistic mentality and constructs the world through cognitive processes (Young & Collin, 2004) which tend to focus on the "unique experience of each of us" (Crotty, 1998, p. 58), stopping individuals from becoming critical. Furthermore, when constructivism is conducted through realist ontology, the researcher is further narrowing down the possible interpretations participants bring to their world.

The social origin of meaning cannot be ignored. Geertz (1973 p. 49) speaks of "a system of significant symbols" where he talks about culture and how cultural symbols are full of meaning that guide our behaviour. Crotty (1998) agrees by stating that we depend on our culture to guide how we behave and direct our lives. Seen in this way, culture is the *source* of how we behave rather than the *outcome* of how we behave. Culture may lead us to see certain aspects of a meaningful phenomenon and at the same time ignore other aspects (Oakley, 1974). Indeed, the notions we attach to phenomena may even blind us to reality (Wolf, 1989).

While I referred to constructionism to guide me on how I should construct meaning in this study, symbolic interactionism was the philosophical stance that acted as a backdrop for the methodological decisions taken along the way and these will be discussed next.

3.3 Symbolic interactionism

Symbolic interactionism, a phrase coined by Blumer (1969), is concerned with the origin and development of meaning and identity and stems from the work of the pragmatist philosopher and social psychologist George Herbert Mead. Symbolic interactionism is a phrase that represents "the study of human group life and human conduct" (Blumer, 1969, p. 1) so congruent with the aim of this study. Symbolic interactionism requires an understanding of the perceptions, attitudes and values of the cultural group being studied and becoming persons in the process (Crotty, 1998). We can become aware of the perceptions, feelings and attitudes of the participants through

dialogue and thus interpret the participants' meanings and intent (Crotty, 1998). Indeed, Mead (1967) asserts that our very personhood is born out of how the social forces shape our behaviour and us. Moreover, it becomes symbolic interaction because as humans, we communicate through language, the most common form of symbols and other symbolic tools, such as communication and interrelationships. In symbolic interactionism, culture is not there to be criticised but to be observed as closely as possible and to adopt an insider's perspective.

Blumer (1969) explains that we learn the meaning of things through the way others behave towards us with regard to that thing. By 'things' Blumer meant anything that a human being may come in contact with, such as physical objects, other human beings, categories of human beings, institutions, guiding ideals, activities of others, and situations that the person may encounter. This had implications when I was observing and interviewing participants since they had their own perspective of IPC. This perspective was built through their own experience of interacting and collaborating with other professionals and this is what I aimed to examine in this study.

Symbolic interactionism also emphasises that meaning emanates from the social interaction of people, including their purposeful efforts to achieve impression management (See Section 3.4 which focuses on Goffman). Therefore, in the complex world of IPC in this paediatric setting, professionals' interactions are continuously happening within a symbolic system that may have different meanings. Such meanings evoke various realities for the people interpreting them; therefore, reality may hold different definitions. Thomas and Swaine (cited in Berg & Lune, 2012) state that it does not matter whether the interpretation is correct or not; for the persons interpreting that meaning this represents reality for them and this will also determine their behaviour.

At the core of symbolic interactionism there is the importance of putting oneself in the place of another and adopting their standpoint (Coser, 1971; Hammersley, 1985; Mead, 1967; Worsley, 1977). Thus, interaction is also taking place when the researcher takes the role of the researched.

Another theoretical perspective underpinning this thesis was the lens of Goffman's (1959) social dramaturgical theory, in particular the concept of scripts used for my interpretation of the data corpus. This is what I will discuss next in Section 3.4.

3.4 Goffman's social dramaturgical theory

Goffman is seen "as the supreme analyst of face-to-face social interaction, with his dramaturgical models for understanding social life" (Pinch, 2010, p. 410). His work has introduced the notions of "face work," "front," "co-presence," "framing," "backstage and frontstage," "impression management" and "the presentation of self" (Goffman, 1959; 2013; 1983) These have been used extensively in research about social interaction, such as in Ellingson (2003), Lewin and Reeves (2011), and Sinclair (1997).

Goffman (1959) looks at everyday human encounters as if the participants were performing on a stage. He describes society through the lens of dramaturgical sociology which is "... the creation, maintenance, and destruction of common understandings of reality..." (Kivisto & Pittman, 2008, p. 272). Humans work at an individual level and collectively to create that reality to do this. Goffman argues that his theory may be applied to all social interactions, some more than others. He maintains that what happens during every encounter is a replication of what happens on stage in a theatre, together with roles, props, scripts, and costumes. Just like actors create a new reality for the audience (See Glossary) by trying to give a different impression of the world, so do individuals during a social encounter. He terms this 'impression management.'

Therefore, my analysis of IPC, attempted to bring interactions between HCPs from different professions to centre stage, whereby I studied the contextually embedded 'performances' of these participants. Every day work was not only done through formal, scripted encounters (for more information on scripts see Section 3.4.2), but also through all the other unscripted facets of what IPC entailed. Darr and Pinch (2013, p. 1613) described these encounters as an "escalating scale of obligation," which in my context meant that work in IPC was done in sequence until the obligation of work was fulfilled. Kivisto and Pittman (2008) support this when they compare encounters with having different phases just like different scenes and acts in a play. The ultimate aim in a play is to get the other person to see reality the same way as the actor sees it. In the

paediatric setting of the present study, professionals had an obligation to provide a service to the patients and their families – an obligation which resulted in moving from one encounter to another, striving to culminate in the provision of the best service possible.

For Goffman (1959), it is crucial that the self is not viewed as detached from the social context but seen as a social whole; a self that is part of a group and through which social reality is created. Indeed, Wasserman and Inui (1983, p. 282) state, "Interaction is best understood in context" because context can completely change the meaning given to a communication (Bateson, 1972). This is why Hymes (1984, p. 622) emphasises that participant observation of these encounters needs to be in-depth "... to discover what counts as a norm in a situation ... [and] one has to address the interactional order as a whole."

Goffman's (1959) central unit of analysis is the team collaborating together to present a performance to give a meaning to a situation and not just the individual's performance. This highlights how teams interact on stage to present complex scenes to represent an intended impression of the world. Goffman asserts that if performers on stage succeed in transporting the audience to another world, one intended by the actors, then so can individuals convince others in the team "... to adopt a particular understanding of various social scenes" (Kivisto & Pittman, 2008, p. 273).

Performance success may be achieved by using tools that are used in theatres. These tools may also be considered as carriers for passing on information. Such tools may include stages and sets, roles, costumes, and scripts. The most pertinent tools for this thesis will be discussed next. These include stages and sets with special focus on scripts, which will be discussed in relation to Goffman's (1959) dramaturgical social theory. By looking at the tools that are used in theatre, I could understand more about what happened in day-to-day interactions.

3.4.1 Stages and Sets

Stages and sets are among the most important tools in drama and the physical environment sets the scene for the audience. Such physical environments can be manipulated to convince others of a reality you wish them to believe in. Similar to what

happens on stage, in real life the "interaction order" is totally dependent on these physical props (Pinch, 2010, p. 149). During interactions, the physical environment can also set the context for the action or interaction that is to follow. Pinch (2010, p. 414) asserts that while on stage and in real life "the staging of the interaction, the mediation of the interaction and its performance depend crucially on the detailed material and technological arrangements in place."

A crucial aspect of the use of a stage in Goffman's theory is the separation between the front and back regions of a theatre. Goffman (1959, p.109) defines a region as "any place that is bounded by some degree by barriers to perception." The frontstage is what the audience will see and therefore the actors need to perform professionally, in character. On the other hand, the backstage is where the actors prepare themselves for the frontstage. This area is also where those not partaking in the present scene on the frontstage spend their time. In this region, all props that are not being currently used are kept and hidden from the audience.

Goffman (1959) also notes that backstage and frontstage spaces may be defined by the purpose they are serving during an encounter. Goffman (1959, p. 113) points out that "the back region will be the place where the performer can reliably expect that no member of the audience will intrude." (For more about audience in this thesis see description in the Glossary). Thus, the back regions are areas usually only accessed by the actor and support teams and are off-limits to the audience. This division between the two regions also affects how actors behave. This change in behaviour between the front and back regions is also evident in everyday life. Indeed, various researchers have used the concept of front and backstage (Ellingson, 2005; Lewin & Reeves, 2011; Sinclair, 1997). In this study, the 'actors' are HCPs working frontstage in paediatric wards and in meetings, also working (and to a limited extent socialising) 'backstage' in offices, staff rooms, corridors and around the nursing station. Depending on the interaction, the 'audience' might include patients, families and other professionals.

Kivisto and Pittman (2008) emphasise important functions for having a backstage in everyday life, apart from it being a very informal context. Back regions not only serve to store objects that are not needed in the front at that moment, but also serve as a place where people can relax and let their guard down or regroup. Backstage areas, such as

the staff room on the ward, away from the 'audience,' can also be used to attend to emotional needs of 'actors' so that individuals can prepare for their 'performance' frontstage (Goffman, 1959) for patients and their families. Performing frontstage and remaining loyal to the HCP role they are enacting, can be emotionally and physically draining. Actors also use the backstage area to discuss what needs to be changed frontstage or what happens when one of the actors or the audience is acting out of character (Kivisto & Pittman, 2008) (See example given in Section 6.5, Excerpt One and followed by Section 8.6, Excerpt One).

Elliott (2013, p. 34) suggests that when Goffman speaks of front and backstage, he is mostly referring to "the frontal aspects of self-presentation ...[and] the bracketing out or screening-off of aspects of identity which are felt to be inappropriate to the social setting or encounter that is staged" irrespective of the physical context. Therefore, on most occasions in social life, individuals behave differently when they are upfront to when they do not have to worry about the face they want to project.

Before continuing on scripts, I will first define encounters in Goffman's dramaturgical social theory. Encounters will be used in this thesis to organise findings in Chapters Six, Seven and Eight. Goffman defines an encounter as "a unit of social organisation" (Goffman, 2013, p. 7) and went to great length to explore how it is related to the larger social structure in which it occurs. He continues to describe an encounter as a "focused gathering" and having participants that get together to perform an activity and focus on a task and who then disperse when the gathering is finished. This resonates with Engeström's (2000; 1999) knotworking (See Section 2.6.1 on Engeström). Moreover, Goffman claims that these participants' coming together may in time become groups. In healthcare settings, these groups are generally called teams. In the study setting, staff turnover was low, thus providing the time and continuity facets of conditions which Goffman's theory suggests supports group and team formation.

3.4.2 Scripts

Among the various definitions of the term 'script,' the Merriam-Webster dictionary defines it as "the written text of a stage play, screenplay, or broadcast; specifically: the one used in production or performance." Indeed, successful productions depend on good scripts, among other things. However,

researchers have used the term ‘script’ as a “structure that describes an appropriate sequence of events in a particular context.” (Schank & Abelson, 1975, p. 151). They continue, “A script is a predetermined, stereotyped sequence of actions that define a well-known situation.”

Vanclay and Enticott (2011, p. 260) define script:

> ... to be a culturally shared expression, story or common line of argument, or an expected unfolding of events, that is deemed to be appropriate or to be expected in a particular socially defined context and that provide a rationale or justification for a particular issue or course of action.

Scripts may also play an important role in helping us to appreciate cognitive and behavioural relationships in organisations (Gioia & Poole, 1984), arising from cognitive psychology and symbolic interactionism (Vanclay & Enticott, 2011). Indeed, the concept of script has been used in other contexts, such as social psychology (Abelson, 1981), gender and sexuality (Frith & Kitzinger, 2001), counseling and therapy (Wiederman, 2005), health promotion (Seal & Ehrhardt, 2004), diagnosis in medical literature (Charlin, Tardif, & Boshuizen, 2000; Custers, 2015; Feltovich & Barrows, 1984), sales and services (Darr & Pinch, 2013; Kivisto & Pittman, 2008); farming and agriculture (Vanclay, Silvasti, & Howden, 2007; Vanclay & Enticott, 2011); the social order of radiology departments (Barley, 1986); and, in organisational behaviour (Gioia & Poole, 1984). Most pertinent for this thesis is that in sociology, script theory has been used as part of symbolic interactionism, particularly using Goffman’s (1959) dramaturgical social theory (Vanclay & Enticott, 2011, p. 256).

According to Abelson (1981), there are generally two types of scripts namely; weak and strong scripts. Weak scripts act to shape what behavior is expected in relation to the behavior of another person, without actually specifying the sequence of actions. On the other hand, strong scripts not only dictate what behavior is expected, but also the sequence in which it is conducted, linking them to conventional and ritualistic actions. However, as will be discussed in the next paragraph, there are more categories of scriptedness than Abelson’s dichotomy of strong and weak. In real life, most everyday interactions are unplanned - unscripted - and some are well rehearsed as if following a script that is strongly scripted. Some scripts are used as a general outline, modified and

not followed fully (Schank & Abelson, 1975). This is because scripts are not inborn but learnt; therefore they can be changed (Dusay, 1976). Strongly scripted examples may include automatic replies we utter without thinking (Kivisto & Pittman, 2008, p 276), also known as "automatic script processing" (Gioia & Poole, 1984, p. 449; Gioia & Manz, 1985). For example, "*How are you?*" *"Fine thank you; how are you?"* Automatically processed scripts echo Howard's (1977) concept of Routine Response Behaviour (RRB) and resonates with Steen's (2007, p. 59) "scripted invoking" actions.

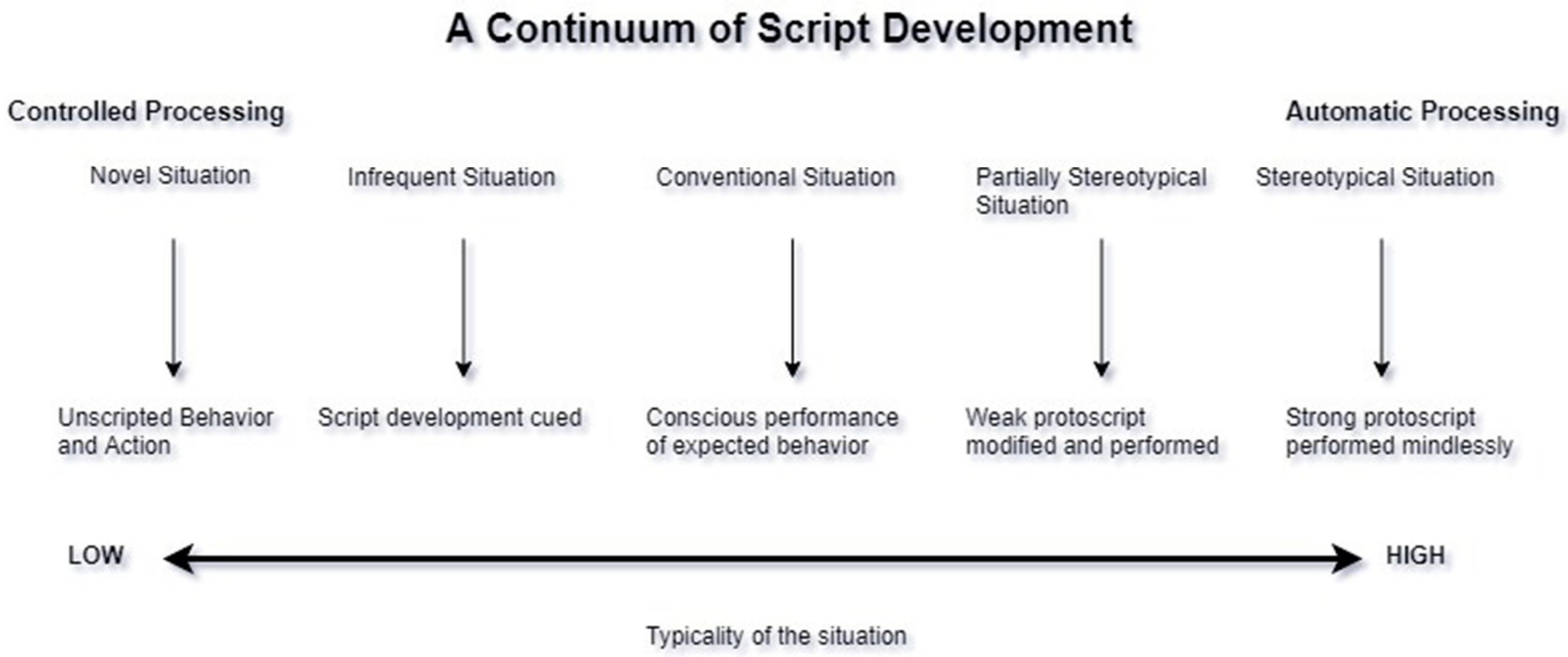
Scripts have also been defined as being "composed of a serious of scenes made up of linked vignettes" (Gioia & Poole, 1984, p. 451). A vignette may be viewed as the basic unit of any encounter that when linked with other vignettes produce a scene. An example of this may be the ward round (See glossary) scene made up of little vignettes representing the different phases of the ward round (See Section 7.2). Gioia and Poole also affirm that scripted behaviour does not always translate into automatic behaviour because people usually think before they act. This also echoes Stebbins' (1967, p. 154) work, "social situations never spontaneously repeat themselves, every situation is more or less new, for every one includes new human activities differently combined."

Moreover, when we consciously encounter new situations, active effort to understand is involved and what Gioia and Poole (1984, p. 449) call "controlled script processing." This is because people have the ability to detach themselves from scripted situations and study what is actually happening at that time (Goffman, 1959), thus creating new scripts. A script does not need to guide all the actions in an encounter in detail (Abelson, 1981; Bozinoff, 1982). People may choose to temporarily stop being guided by the script and invoke "free behaviors" (Steen, 2007, p. 235), according to what their thinking guides them to do. Thus, fluctuation from strong to weak can occur within scripts (Bozinoff, 1982).

Gioia and Poole (1984, p. 453) describe "A continuum of script development" with unscripted behaviour when coming across a new situation at one end, a strong script performance in familiar situations at the other end and other categories of scriptedness that fall on the continuum and reflect the frequency and predictability of the situation

(See Figure 3.1, Permission given to reproduce this figure from The Academy of Management Journal. See Appendix 3).

Figure 3.1 A continuum of script development



(Gioia & Poole, 1984)

Thus, strong scripts allow participants to repeat an interaction in a rehearsed way and remain largely consistent even in different contexts. In healthcare organisations, script development helps to facilitate the day-to-day work (Gioia & Manz, 1985). Thus, scripts may be seen repetitively in the day-to-day interactions and what Goffman (1983, p. 2) identifies as an "interaction order." Such examples may be during clinical procedures, the ward round or the multidisciplinary team (MDT) meetings that include patients and their families, where professionals know what needs to happen and follow 'hidden' rules. Hence, scripts not only help to understand what is happening during an encounter, they also guide individuals in the sequence of behaviour and help to understand others' behaviour (Gioia & Poole, 1984; Gioia & Manz, 1985). These encounters not only progress the day-to-day work but also tend to produce and re-produce the social order of such encounters (Darr & Pinch, 2013). In dramaturgical terms, participants have distinct professional roles and usually follow scripts when collaborating.

Although some analysts view scripts as cognitive phenomena or mental models (Schank & Abelson, 2013), others find it more useful to position them in the behavioural domain (Barley & Tolbert, 1997; Gioia & Poole, 1984). Moreover, interactions happening in particular settings or subcultures will have their own characteristics and are remnants of more general principles, which have social meaning (Barley, 1986; Vanclay & Enticott, 2011). Barley (1986, p. 96) for example, used the "direction seeking" script to represent medical dominance - radiologists in this case - in a radiography department. Although the reason for radiography technicians seeking direction was different in each encounter, each interaction followed the same pattern. Barley and Tolbert (1997, p. 101) give an example:

> (1) A technologist inquired about an appropriate course of action;
> (2) A radiologist provided the technologist with an answer;
> (3) The technologist acted accordingly.

However, Barley (1986) claims that in certain encounters, even though those seeking direction already knew the answer, they had so internalised the script that they asked for direction anyway, which then perpetuated the dominance of the expert giving direction.

Just as positive previous encounters can develop into scripts that guide future behaviour, so do negative encounters. If something goes wrong during an encounter, the learned sequence of actions that follow may influence any behaviour in the future cued by similar situations (Gioia & Manz, 1985). Schank and Abelson (1975, p. 153) identify "at least three major ways in which scripts can be thrown off normal course." The first is "distraction" closely connected to "interruption by another script." The second is "obstacle," when something hinders the normal structure of events or something that usually facilitates the flow of an action is absent. The third is "error," when an action is completed in an incorrect manner, resulting in an inappropriate outcome. Thus, obstacle and error are closely connected with the concept of "what-if behaviour" (Schank & Abelson, 1975, p. 153). Indeed, they highlight that each action is inclined to be affected by obstacles and errors and that the measures taken to solve obstacles and errors will then become part of the script as 'what-ifs.' The more obstacles and errors encountered and the more what-ifs experienced, the more they become part of the script (For examples see Sections 6.5 and 8.2).

3.4.3 Critique of Goffman's dramaturgical social theory

Although in the previous sections, Goffman's dramaturgical social theory was discussed in the light of how it can be useful in analysing my data, it is not without flaws. Indeed, Goffman's (1959) social theory has been criticised in that it is more concerned with what is going on between individuals at the micro level, paying little attention to how these encounters are affected by the macro level (Kivisto & Pittman, 2008). This highlights a potential limitation to this thesis, thus flagging a need for vigilance. However, Goffman also leads us to understand that the interaction order is the basis of the structure of society and that it is also very important to understand the micro perspective. For this reason, looking at the micro level, as the case in the present study, is an attempt to understand society at large.

Goffman's dramaturgical social theory can also be worrying if individuals were to put up appearances (impression management) and perform false representations during all human interactions. While Goffman called for the theatre metaphor, he also maintained that, "there is a self-standing behind the multitude of roles that any individual performs in daily social interaction" (Elliott, 2013, p. 36).

It has been argued that scripts are essential to give direction to a sequence of events, which may influence how we see the world and the decisions we take. This can limit the actions and decisions individuals take since they may not look critically at their subculture, therefore passively accepting how others expect them to behave in that group (Vanclay & Enticott, 2011). However, Taylor (2003, p. 28) supports Goffman and describes scripts as "scenarios" where scripts are neither strictly written nor entirely impromptu. Taylor (2003, p. 28) looks at scripts as "meaning-making paradigms that structure social environments, behaviours, and potential outcomes." Above all, a script should still permit actors to be practical within their cultural group (Alexander, 2013).

Scripts develop within particular subcultures (Vanclay & Enticott, 2011) and assist actors in a group in knowing what to do or say next during encounters. However, scripts may also exclude others who are not members of the group because during social interaction, a person usually has expectations of what the other individual needs to do or say (See example given in Section 8.4). Scripts also influence the probabilities of how events could unfold and thus events remain unchallenged.

In the next section, ethnography will be discussed, highlighting its strengths and also its drawbacks.

3.5 Ethnography

Ethnography has its roots in Western anthropology when it was "a descriptive account of a community or culture, usually one located outside the West" (Hammersley & Atkinson, 2007, p. 1). However, Delamont (2004) asserts that sociology has also used ethnography since the 1890s, the same as anthropology, even though it never acquired the status and sole domination it has in anthropology. Ethnography has evolved over the years and now refers to the researcher carrying out an empirical investigation using a theoretical and comparative interpretation of what is happening socially and culturally in particular places, including areas within Western societies (Delamont, 2004; Hammersley & Atkinson, 2007).

Ethnography as a methodology was chosen because it allows for an in-depth understanding of how IPC is enacted in this paediatric setting and has the advantage of

generating descriptions of social action and interaction including hospitals (Hammersley & Atkinson, 2007; Reeves, Kuper, & Hodges, 2008; Reeves *et al*., 2009). The main aim in ethnography is to create a rich and in-depth account of the participants' culture including views, actions, sights and sounds, as well as a description of the nature of the location being studied (Reeves *et al*., 2008).

Hammersley (1985, p. 152) concurs that ethnography is a form of research that treats the social setting as "anthropologically strange" no matter how familiar the setting is to the researcher. The perspectives and practices of the people in this setting have to be documented so that there is a good representation of how this group of people sees the world. Moreover, ethnography needs to be concerned with what is happening every day in this social context and avoid being drawn to the unusual and 'exotic' whilst overlooking the ordinary (Atkinson & Pugsley, 2005). On the other hand, the researcher "resists schemes or models which oversimplify the complexity of everyday life" (Denzin, 1971 p.168).

Ethnography's complexity contributes to the difficulty in finding one comprehensive definition to describe it. For this reason, Hammersley and Atkinson (2007) focus on what researchers do in ethnographic research to define ethnography. The common characteristics they identified include that the study takes place in the participants' natural environment; that the researcher gathers data through various methods, the most common being observation and informal interviews; an unstructured data collection design which is developed as the study progresses; categories which are generated by inductive analysis; an in-depth study of a particular setting or case; an analysis consisting of interpreting the meanings of human behaviour, how this fits into the organisational practice and the wider setting; and a final write-up with in-depth descriptions including the participants' verbatim excerpts. I tried to work as closely to these guidelines as possible.

Another characteristic of ethnography is concerned with exploring existing theories by producing descriptions and explanations of existing phenomena or with developing theories (Hammersley & Atkinson, 2007). In the light that the literature pertaining to IPC in the paediatric setting is still limited, then the call for this study is highly favourable and augurs for a good starting point. Hammersley and Atkinson (2007, p.

24) continue to argue that throughout the research process, the researcher needs to develop the research problem into "a worthwhile and viable form," without excluding reflecting and reading about the problem in the early stages before entering the field.

Also, central to ethnography is the persisting importance of participant observation in the field and first-hand engagement with the social worlds (Delamont, 2004). This approach to data collection may give voice to the participants who may be marginalised or disempowered while at the same time challenge those in power (Hammersley & Atkinson, 2007). Such a situation does not necessarily arise when there are two distinct groups, the oppressed and the oppressors, but may also arise when there is a diversity of individuals and groups motivated by various ideals and interests, and pursuing various political strategies (Hastrup & Elsass, 1990) such as what happens where there are individuals of different professional status. This is why ethnography may also raise consciousness about the situation the participants find themselves in and gives them space to be responsible in taking action to plead for their own cause. The issue of giving voice to the participants has been criticised in that it is the researcher who decides what to study and how, and whose voice is heard in the written ethnography (Atkinson & Hammersley, 1994). Therefore, an effort will be made to remain true to the verbatim extracts as much as possible so that the participants' voices are heard. Ethnography is also "flexible and responsive to local circumstances" (Hammersley & Atkinson, 2007, p. x) but also needs careful preparation for the field because ethnography requires personal commitment and a good interpersonal interaction with the participants (Punch, 1994).

3.5.1 Limitations to ethnography

Ethnography, with observation as its central method, has its own limitations. Punch (1994) identifies limitations, such as the prolonged personal commitment in the field and the role conflicts that may be encountered. Punch cautions researchers about the barriers that may be encountered in the field, among them gatekeepers who may obstruct data collection and organisational resistance. Observing informal interactions and backstage practices may be difficult to do because these are mainly done in no specific fixed place and therefore may be difficult to audio-record, making the researcher adopt various strategies for data collection (Atkinson, 1995). There is also an ethical concern about observing private informal interactions, as well as work-related informal interactions. What is said in confidence might end up being used as excerpts to

substantiate analysis. Cassell (1978) asserts that the greatest risk in ethnography is most likely to emerge during publication, an issue which will be discussed further in the ethics section (See Section 3.9).

Researchers have also argued the issue of objectivity in ethnographic research. Indeed, Atkinson and Hammersley (1994) state that ethnographic write-ups are but constructions of the researchers. This is in contrast to what ethnographers aspire to in their research; that is, to capture the nature of the social world which, in turn, generates knowledge that is contextually universally valid. Ethnography is also time-consuming and involves a long-term commitment to the participants (Ellingson, 2003). Prolonged engagement in the field was necessary if the whole picture of what was going on in this particular cultural group was to be captured. On the other hand, time may be restricted with time frames necessary to complete the study. Other issues related to time, such as when to leave the field and what time of day or night to observe will be discussed in Sections 3.7.2 and 3.7.7.1 respectively. Being overwhelmed with the great amount of data that is generated (Hammersley, 1992) may prove to be a challenge. Therefore, ways of how to organise and manage data need to be found. In this study, the computer-assisted qualitative data analysis software, namely NVivo 10 was used for this.

Ethnography, like other forms of social research, has been criticised for having little impact on the world and even considered worthless at times. In order to be valuable, such studies need to move beyond simply understanding the world but also disseminate and apply findings to implement change (Hammersley & Atkinson, 2007). Dissemination of findings is planned through publishing papers and presenting papers in conferences.

3.6 Insider/outsider researcher

A central issue in qualitative research is the perspective adopted, whether being an insider or outsider researcher (Hammersley & Atkinson, 2007). The insider/outsider dimension of research, especially in ethnography, influences the perspective that is taken. This happens because "the researcher plays [...] a direct and intimate role in both data collection and analysis" (Corbin Dwyer & Buckle, 2009, p. 55). Insider research refers to that conducted with participants with whom the researcher is familiar or a

member of the same community (Kanuha, 2000). More importantly, the researcher needs to, at least, share an identity and language with the group (Asselin, 2003). Being an insider usually allows the researcher easier access to the setting and being familiar to the participants potentially yields richer data. However, it is possible that participants may assume the researcher knows enough about an issue and thus, may not share their experience to the full.

I am a paediatric nurse, currently working as a nursing tutor at a university from which students are placed in some of the wards where this research study was conducted. Consequently, I work in these wards periodically, supervising and mentoring students. This will be discussed further in Section 3.10 which focuses on reflexivity. This necessitated consideration of the multiple ways in which I was an insider/outsider researcher and the impact on the design and conduct of this study.

Insider research has potential problems such as 'role conflict' of being both a practitioner and researcher. This is discussed further in Section 9.8 while reflecting on my experience of being a practitioner/researcher during the whole research process and especially during data collection. Another potential problem is when the researcher finds it hard to differentiate between personal perceptions and experiences and that of the participants' (Corbin Dwyer & Buckle, 2009).

In my case, having previously worked in some of the areas of this setting and knowing many of the participants has certain implications. My intention is to embrace my role as an insider and I agree with Rose (1985, p. 77) who commented that, "There is no neutrality. There is only greater or less awareness of one's biases." My role was mainly as an observer/researcher but since I am also a nurse, I participated in minor tasks as described in Section 3.7.2 which discusses participant observation.

Proponents of insider research assert that this is a very valid stance (Asselin, 2003; Kanuha, 2000). Being an insider does not make a better or worse researcher; it just makes a different type of researcher (Corbin Dwyer & Buckle, 2009). Having said this, being an insider does not mean "complete sameness within that group." On the other hand, "not being a member of a group does not denote complete difference." (Corbin Dwyer & Buckle, 2009, p. 60). Indeed, Fay (1996) noted that at times, occupying the

space between being an insider or an outsider allows the researcher to be both, depending on the situation. Gould (2003) states that qualitative researchers tend to frame these positions as being on opposing sides. However, Corbin Dwyer and Buckle (2009, p. 62) argue that qualitative researchers are "uniquely equipped" to occupy the space between the two perspectives.

3.7 Data Collection

Data collection for this study occurred in the paediatric inpatient setting of one hospital in Malta. This setting is described in greater detail in Section 3.7.1 which explains how the setting was selected, whilst Section 3.7.1.1 summarises the process of gaining access to the study site. The methods of data collection to answer the research question included **participant observation**, as well as **informal and more formal semi-structured interviews**. The data corpus included field notes from 114 hours of observation from 38 observation sessions, divided between four clinical wards in one paediatric setting; 14 semi-structured interviews with 7 different professionals (a physiotherapist, a social worker, a nursing assistant, a ward clerk, a teacher, three doctors, and six nurses) and several informal interviews with participants during the observation sessions. These methods are discussed in more detail in Sections 3.7.2 and 3.7.3.

The targeted participants are all HCPs working in this paediatric setting. Sampling of people will be discussed in Section 3.7.7.2. The participants in this study setting were bilingual, using both Maltese and English during different encounters. The complexities of using two languages are discussed in Sections 3.7.4 and 3.7.5. This is followed by a summary of the part that documents played in this study in Section 3.7.6. Section 3.7.7 considers sampling during data collection from three perspectives namely; time, people and contexts.

3.7.1 Selecting the setting

The paediatric setting was specifically selected as a result of the initial scoping literature search which highlighted that IPC was lacking in in-patient paediatric care. My interest in paediatrics emanates from having worked in such clinical settings throughout my

career as well as having a particular interest to know more about how IPC is enacted within such a setting. The selected setting is within a general hospital and consists of four paediatric wards, where children are hospitalised overnight. Other day case areas, namely the paediatric day care unit and the paediatric outpatients department have been excluded since this study focuses on in-patient settings. I believe that this approach encouraged a more in-depth investigation than would have been possible had I chosen more wards and hospitals.

The four wards consist of two medical wards, one having 18 beds, the other 11, a surgical ward with 20 beds and a small oncology unit having 6 beds. The layout of each ward is different but they each have similar facilities such as the nursing station, examination room, treatment room, dirty and clean utility rooms, offices, bathrooms, a play area and a staff room. Each ward has its own team of nurses, nursing assistants, ward clerk and play teachers, while other professions such as physiotherapists, social workers, occupational therapist, doctors, teachers and psychologist move from one ward to the other. To give an idea of how busy these wards are, collectively, in 2015 the four wards admitted 6,313 children as in-patients and 2,708 children as day-attendees in the same wards (Borg, Buttigieg, & Distefano, 2016). Children make up 16% of the Maltese population.

Due to my nursing tutor role, I do have a certain familiarity with these particular wards and I am acquainted with some of the staff working there. However, I have never been employed as a nurse in the research study site since paediatric in-patient services moved to this hospital in 2007, after I had left full-time clinical work to pursue a career in nursing education.

3.7.1.1 Gaining access

Gaining access to these wards was not difficult. I approached the four nurses-in-charge of the wards as well as the Chairman of paediatrics and requested permission for me to proceed with my investigations. They all verbally consented and I was able to apply for ethical approval. This initiated the task to obtain the formal consents and approvals required by the ethics boards. More details are given in Section 3.9.

Once ethical approval to access the four wards was given, I then had to obtain consent from the participants. Although sometimes it took a while for participants to understand what the study entailed, on the whole, participants consented immediately. I only found some difficulty on one particular ward where I had misread the non-verbal responses of the participants as being negative and not wanting to participate. However, when I personally explained more about the study, they became more interested and signed the consent form (More about consent in Section 3.9.1).

Although all participants gave written permission, verbal permission was once again sought each time I needed to access any domain. Also, due to the prolonged engagement in the field (18 months), access was renegotiated every time I attended a new ward. Observations were also extended beyond the boundaries of the setting when I was required to go beyond these boundaries to collect data. A case in point was the different health professionals' offices away from the wards or the case conference rooms which were not situated on the wards. This selection of different areas where to observe was a continuous process during the study (Hammersley & Atkinson, 2007) (See Section 3.7.7.3).

3.7.2 Participant Observation

Hammersley and Atkinson (2007) argue that all social research is a form of participant observation since the social world cannot be studied without actually being part of it. For this study in paediatric in-patient settings, I adopted the role of a participant-as-observer (Gold, 1958; Lindlof & Taylor, 2010), meaning I was mainly an observer and that both the participants and myself were aware of our roles during the research study.

As a researcher engaged in ethnography, I collected data by participating in the participants' daily lives, "partial immersion" (Delamont, 2004, p 218), for a considerable period of time. I needed to use all my senses to try to understand what was happening by observing, listening, questioning, recording, examining and using whatever was available to shed light on the phenomenon being explored (Hammersley & Atkinson, 2007; Schwandt, 1998). This entailed partial but "prolonged immersion in the life of a group, community or organisation" (Punch, 1994, p. 84). Furthermore, I needed to think carefully about what I was observing, to interpret it and talk to the participants to check the emerging interpretations and present an ethnography that gives

a theorised account of the culture being studied by using ethnographic methods (Delamont, 2004).

In this study, participant observation was used to include a mixture of observation and interviewing (Delamont, 2004), that is, using informal or conversational interviews to discuss any emerging issues or to clarify further any unusual events (Reeves & Lewin, 2004). The conversational interviews were kept to a minimum so as to avoid interruption and potential reactivity.

The first two observation sessions in each ward were what Spradley (1980) calls comprehensive ethnography where I recorded all that was happening. By using Agar's (1996, p. 183) "funnel" approach, during the first sessions of observation, I was writing notes *in situ* about everything that was happening in the field. This included aspects which might not have seemed so important at the time, but which during analysis might make more sense and become important. This resulted in having extensive field notes.

In the following sessions, I chose a different approach and the observations became more topic-oriented. For example, behaviour related to IPC and influenced by sensitising concepts which I had encountered in literature on IPC. Another example is the nature and quality of relationships, how responsibility and decision-making was shared, the different modes of interaction, and who was participating in these interactions. In my field notes I also noted any quick decisions I needed to take while in the field (An example of this is given in Section 3.8, Figure 3.3).

Although the observations shifted to becoming more selective, I still continued to observe what was happening in general right up to my last observation session. These observations sought to provide an empirical description of what had taken place (Dixon-Woods & Bosk, 2010). Drawing upon the work of Spradley (1980), Reeves *et al.* (2008) identified nine observational dimensions. These nine dimensions were used as sensitising concepts and part of a mental checklist that I ran through to remind me to take note of a whole list of aspects (Table 3.1).

Table 3.1Nine observational dimensions

Dimension	Description
Space	Physical layout of the place.
Actor	Range of people involved.
Activity	A set of related activities that occur.
Object	The physical things that are present.
Act	Single actions people undertake.
Event	Activities that people carry out
Time	Sequencing of events that occur.
Goal	Things that people are trying to accomplish.
Feeling	Emotions felt and expressed.

Prolonged participant observation, that includes both observation and informal interviewing, was chosen over interviewing on its own as participant observation goes beyond the informants' impression management (Delamont, 2004). Reactivity or impression management will be discussed in Section 3.7.2.1.

My participation in the daily activities of this cultural group was minimal and comprised carrying out mundane activities of answering the phone, helping to make beds, filing, and relaying messages between professionals. This was enough to allow me to fit in as part of this group and perhaps see things which the participants might not have been aware of. Therefore, by spending long periods watching the participants, talking to them about what they were doing, thinking and saying, trying to see how they understood the world, I explored what was happening in this group. I was continually asking myself various questions, such as "*How do participants organise their behaviour in relation to IPC*" and *"How do I interpret their experience?"* Just as observations moved from being descriptive, to becoming more focused and then being selective, so did the questions move from being first descriptive, then more structural and then contrasting questions to guide and focus further observations.

There are no hard and fast rules determining how long fieldwork (See glossary) should continue. Indeed, Jeffrey and Troman (2004) assert that it is quite difficult to establish what the correct length of time in the field is. However, it is recommended that fieldwork continues until analysis no longer yields new and significant data (Atkinson & Pugsley, 2005). This requires a close relationship between fieldwork and analysis.

Since I chose four different wards in a paediatric setting, time was also a deciding factor on when to stop data collection, even before such saturation occurred. Despite this, a lengthy involvement in the setting was accomplished; otherwise I would have ended up with partially sampled data that may mislead analysis (Woods, 1994). I always strived to write up the extended notes of any observation session before the next session and also open-coded the notes of a group of sessions at a time. Long periods of observation without preliminary analysis is discouraged as they become unmanageable (Hammersley & Atkinson, 2007). In all, I held 38 observation sessions (approximately 114 hours in total). These observations covered most aspects of the clinical practice in this setting but mainly focused on the interactions during ward rounds; those happening near the nurses' stations, in the corridors, treatment/examination rooms, and other places where MDT meetings were held.

Participant observation as a method of data collection has often been criticised that it is subjective. It needs to be emphasised that ethnographers do not just lightly describe what they observe but pay careful attention to what is said and done. Moreover, careful documentation is then systematically analysed and participants' views represented by verbatim excerpts.

3.7.2.1 Reactivity or impression management

Atkinson and Pugsley (2005) state that there is a common misconception that data yielded through observation may not be valid because of the effect that the observer may have on participants' behaviour. Behaviour may change for the purpose of impression management. This may be true in instances where observations have the nature of being sporadic and of an evaluative nature. However, in this study, participant observation occurred over a prolonged period of time, running into months, where it was very hard for the participants to keep up with the dramaturgical skills that may

come into play in those one-off inspections. This is supported by Monahan and Fisher (2010, p. 370) who assert that "self-censorship" or behaviour modification usually fade away over time as the researcher becomes more integrated with the participants. In addition, Monahan and Fisher (2010, p. 357) look at "observer effects" from a different lens and see benefits from such an effect. They argue that informants' behaviour that may be staged for the observer (staged performance) can reveal insightful truth and generate interesting data which, in turn, may result in valid findings. Indeed, they affirm that, in attempting to distance themselves from the participants, researchers "may be restricting their access to rich data in the field" (Monahan & Fisher, 2010, p. 370). Such data can also be verified and clarified through interviews where what is said is compared with what is practised and vice versa.

I also tried to strike a balance between how much information about the study to convey to the participants so that their consent is informed, and at the same time not give too much information for them to process and cause reactivity. I also enjoyed a good *rapport* with many of the participants; so in their busy schedule, they were most likely to forget why I was there. The better the *rapport,* the less stressful observation was on the participants, especially since I was observing part of their work (Hammersley & Atkinson, 2007).

3.7.3 Interviews: Formal and informal

Interviewing participants is a method of collecting data on participants' experiences in various contexts (Polit, Beck, & Hungler, 2001). Interviews in ethnography are also known as 'conversations with a purpose' and range from spontaneous conversations, during the course of observation, to formally planned conversations (Hammersley & Atkinson, 2007). The questions that are asked in ethnographic interviews are reflexive in nature and structured questions are rarely prepared beforehand.

In all, I conducted fourteen interviews. For the purposes of this study, a semi-structured interview guide (Appendix 4) was prepared and questions were modified according to the emerging findings (Burnard, Gill, Stewart, Treasure, & Chadwick, 2008). At most times, interviews were very lightly structured and interviewees were allowed to talk at length on issues that were uppermost in their minds, with the consequence that they sometimes deviated from the topic at hand, which was IPC. I did this to minimise my

influence on the conversation and to let it flow naturally (Hammersley & Atkinson, 2007). At times, participants used interviews to vent feelings about the organisation/system or some other colleague's behaviour. Venting such feelings is an important way for dealing with stress in healthcare settings (Laine-Timmerman, 1999). However, I had a list of issues to be covered and interviews were not merely conversations but conversations with a purpose, deciding which issue to tackle, as the interview progressed (Holstein & Gubrium, 2003). My main role was to be an active listener. The accounts that participants told yielded information about their perspectives, the culture they belonged to and the world they lived in. At times, I also wished to clarify any ambiguity or test inferences that progressively arose from the on-going analysis (Hammersley & Atkinson, 2007) by asking focused questions. The answers sometimes helped me to focus my next observation session and also added to my field notes regarding a particular event.

Hammersley and Atkinson (2007) regard interviews as important sources of generating information that would not otherwise be possible. They conclude that interviews can add to the data obtained by observation and vice versa. On the other hand, different research methods may lead to different data being collected and thus perhaps lead to different conclusions. In this study, most of the data collected during observation was congruent with that obtained during the interviews.

The setting where the interview is done is as important as who does the interview (Hammersley & Atkinson, 2007). In all, fourteen interviews with individual professionals who participated in the observational phase on the four wards were conducted in a place chosen by the interviewee. The interviews were recorded and transcribed verbatim by the researcher and by a transcriber.

During the course of other forms of informal conversations, participants were also continually relaying information that I did not necessarily ask for. These naturally occurring verbal accounts provided invaluable information about the participants and their social milieu. Such conversations were more likely to occur in places like the nursing station, more than in others (Hammersley & Atkinson, 2007). Indeed, such unsolicited information is considered to be more valuable by some researchers as the information conveyed is not influenced by the researcher's questions (Becker & Geer,

1960; Potter, 2005; Speer, 2002). Nonetheless, this does not guarantee that the researcher's presence has no influence on the participants; some element of reactivity is always present (Hargreaves, Hester, & Mellor, 1975). Indeed, Hammersley and Atkinson (2007) assert that this reactivity needs to be acknowledged and no attempts made to collect pure data devoid of any bias, but to interpret such data in the context it was gathered. This has already been discussed in Section 3.7.2.1.

Sometimes my informal conversations with the participants were more of a social nature and although, at the time, I may have considered these to be taking up precious time that could have been spent on data collection, they proved to be productive in that they helped to build a better *rapport* with the participants. It also relieved some of the tension or intrusion I may have created by asking questions directly related to the study (Hammersley & Atkinson, 2007). Indeed, Agar (1980) and also Okely (1983) admit that during their research, prior to asking probing questions, such as those asked during interviews, a good relationship needs to be built between researcher and participants.

3.7.3.1 Interview Transcripts

A Maltese transcriber, proficient in both the Maltese and English languages, was given the responsibility to transcribe the fourteen formal interviews from the recordings. Those in the Maltese language were transcribed verbatim into Maltese. The reason for this will be discussed in Section 3.7.5.

After transcription, I listened to each interview repeatedly while reading the transcripts so as to really comprehend the implications of what had been said. Whilst listening to the interviews, I could go back to the original interview in the field and made sure that any field notes written during the interview had been inserted in the right places. These field notes included subtleties, such as how relaxed or tense the interviewee looked, or any other non-verbal aspects of communication that were not captured in the recording. While reviewing the transcripts, I also checked the notes regarding the signals inserted by the transcriber to highlight when interviewees were emphasising something or when they paused to think what to say.

3.7.4 Bilingual ethnographic field notes

My field notes include those notes taken during participant observation on the wards and also notes taken during the multidisciplinary team (MDT) meetings. These field notes were written in English. The MDT meetings and the informal interviews were not recorded because these were usually unplanned, so I had to rely on my memory and the short notes taken in real time. However, I wrote the expanded field notes for these observations immediately the observation session was over so that events were still fresh in my mind.

The notes taken during observations and conversations were systematically transformed into data. Thus, one hour of observation and participation resulted in hours of writing extensive field notes that comprised detailed reconstructions of what was said and done (90 pages of typed extended field notes text overall). During observations in this study, participants spoke in both English and Maltese. These two languages, which are both Malta's official languages, are used concurrently and most Maltese, including myself, code-switch (Muysken, 1995) during the course of a conversation. Field notes were taken based on these conversations in the language in which they had taken place and were also analysed as such. Only those parts that were needed for in-text verbatim excerpts were then translated into English by the same transcriber. This will be discussed further in the next section.

3.7.5 Language and ethnography

According to Spradley (1979, p. 17) "Language is more than a means of communication about reality; it is a tool for constructing reality." Language has a major role to play in human experience; a role that we sometimes tend to take for granted (Spradley, 1979). Moreover, Spradley argued that language pervades each step of the research process. He was referring mainly to that spoken by the researcher and that spoken by the informant. He also emphasises that there are two other languages used in ethnography. These are the language of discovery used in observation, interviews or in other methods of data collection and the language of description, that is, the language used to describe and write up the ethnography.

The more familiar I became with the language of the participants, that is, the meaning participants attached to their spoken words, the better questions I asked; questions that

may have made more sense to the informants by using their language and therefore may have yielded richer data. Being a former clinician helped me understand their language and meaning but I also had to be vigilant not to unintentionally accept what they had said by being reflexive.

However, the issue of language has other important implications for this study as informants, apart from using the language that they have internalised through their profession, also opted to use any of the two official languages, namely Maltese and English.

Analysing data in their original language may have enhanced the results of the analysis to be more true to the participants' concepts of reality, concepts that might otherwise be lost through translation because of subtle but important language differences (Spradley, 1979; Vallance & Lee, 2005). Despite taking such measures to be as true as possible to the participants' own terms, Spradley states that the final write-up will always have an element of 'translation' as it will also include the ethnographer's terms and their meanings (1979, p. 22). According to Vallance and Lee (2005), working in the original language has methodological advantages, such as enhancing trustworthiness, as in this way, analysis is more sensitive to what the participants are communicating and can increase the soundness of the research outcomes.

In order to enhance the analytical rigour of the study (Seale, 2003), it was decided to use a computer-assisted qualitative data analysis software (CAQDAS), namely NVivo 10. Although the English interface was used, this programme could still be used with transcripts written in Maltese because it uses the Roman alphabet. Another advantage to using the original language of the transcripts is that it saves time from having to translate all Maltese transcripts into English so that only the chosen excerpts to support analysis of data and exemplify categories were translated.

Although some researchers argue in favour of analysing in the original language, a recognised disadvantage was that only those who are well versed in the Maltese language are able to read those accounts in Maltese. Since my supervisors are English, I felt it important for them to be able to properly verify the analysis. This may have initially prevented me from having a more critical analysis of these excerpts from my

supervisors. Therefore, the relevant excerpts were translated into English and every effort was consequently made to present an accurate translation of the selected Maltese scripts.

3.7.6 Documentation

Another source of data in this study are the documents used in everyday clinical practice which are always written in English. The patients' notes, so central to IPC, are mainly used by doctors but also by other professionals to log in the patient's progress and to communicate with their colleagues. The nursing report is another document kept in the patient's profile and mainly used by nurses. Here, they record care given to support asynchronous communication and handover. Other documents examined by myself include the ward-round-book and the ward diary. These are discussed in further detail in Chapter Five, which focuses on asynchronous IPC.

3.7.7 Sampling

Hammersley and Atkinson (2007, p.35) declare that there are "three major dimensions" where data sampling can occur namely; time, people and context. More details are given on each aspect in the next sections.

3.7.7.1 Time

In this study, time was not only related to the time of day or night, but also to the day of the week, month and season. Observations commenced in May 2013 and ended in November 2014, eighteen months in all. From previous clinical experience, I anticipated that interactions between professions would offer different dimensions, depending on the time of day such as during the busy hours of the morning when apart from the nursing and other staff, consultants (See glossary) and their teams are also conducting ward rounds, as compared to a more tranquil afternoon or night shift, when only nurses and doctors on call are present on the ward.

The weekend also presented different data from that presented on weekdays, as it was quieter on the wards with more nursing staff present and fewer doctors and consultants present. This is what Hammersley and Atkinson (2007) describe as temporal patterns. To have a good representation of the whole range of personnel, observation was conducted during different times of the day and the week across different shifts and

rosters. This was accomplished by establishing two to three hour visits, what Jeffrey and Troman (2004, p 540) call "a selective intermittent time mode." Longer sessions are not advised because the recall of what is observed is decreased the longer the session (Hammersley & Atkinson, 2007).

Salient periods, when IPC was more likely to be observed, included nurses' handover in between shifts and after ward rounds, doctor's handover in the morning, during ward rounds, during case conferencing and most importantly, in the morning when the different ward rounds were being conducted near the bedside and when several professionals approached the nursing station to exchange information.

In ethnography, it is most important to organise the sampling of time in a way which includes both what is routine, as well as those instances that are extraordinary. Such a systematic data collection method may result in a more comprehensive coverage of what I set out to study. The issue of how much time to spend in the field was discussed in Section 3.7.2.

3.7.7.2 People

Participants in ethnography are sampled on a purposive basis. Indeed, "qualitative studies do not usually have predetermined sample sizes" (Kuper, Lingard, & Levinson, 2008, p 687). The participants in this study included all professions working in the paediatric setting at the time of the study. I therefore included any team member who:

- Is involved in the care of the child; or
- Attends ward rounds or case conferences; or
- Participates in the exchange of information about the child.

In other words, those who seek to work together for the good of the patient. These included professionals and semi-professionals and are listed in Table 3.2.

Table 3.2 Distribution of participants by professional discipline

Professional/ semi professional discipline	Number
Nurses	48
Doctors	41
Nursing assistants	18
Consultants	13
Student doctors	10
Student nurses	8
Ward clerks	4
Play teachers	4
Teachers	2
Physiotherapists	2
Occupational therapists	2
Psychologists	1
Social workers	1
Total	**144**

As advocated by Patton (2002), this group of participants included a wide range of demographic characteristics and clinical experiences, as expressed by the participants during informal conversations. To strengthen anonymity, (For more details see Section 3.9.2) details of demographic characteristics are not provided in the thesis. Other staff who were observed and included in field notes but not included in Table 3.2 since the focus of this study is IPC, were the cleaners, maintenance persons, other service delivery persons and occasionally, hospital management personnel.

During the course of the observations, interactions also included parents of the hospitalised children and the children themselves even though they were not the main focus of this study. Children's vulnerability and inability to provide full consent leads to ethical issues when conducting research with children (Davidson & O'Brien, 2009). This will be discussed in Section 3.9.1. Consequently, HCPs' interactions with children

and parents were only sampled if they were pertinent to IPC and when the observation could be unobtrusive.

Although the whole population of HCPs present during observation was eligible to be included in the observation field notes, some sampling was necessary to achieve sufficient depth of understanding and since not every interaction on a busy ward can be observed simultaneously. Even so, the sample selected needed to represent the people involved (Delamont, 2004). Purposive sampling of HCPs sought diversity in gender, professional role and years of experience. When such purposive sampling is generated by the developing analysis, theoretical sampling is said to occur (Atkinson & Pugsley, 2005). Sometimes, samples emerged from the participants themselves, what Lofland (1976) calls member-identified categories. Member-identified categories in this study included the patient case conference MDT meetings which were identified by two of the participants being interviewed. I would probably have missed these meetings as they are usually held outside the wards.

Following the traditional ethnographic approach, participant observation was complemented by brief interviews, that is, using informal or conversational interviews to discuss further any emerging issues or clarify any puzzling events (Reeves *et al*., 2008). Informal conversations were initiated with purposively selected professionals only when this did not disrupt the everyday care of the patients and when I needed to obtain more information on an event.

In cases where the investigation cannot be exhaustive because of its size, decisions need to be taken about "where to observe and when, who to talk to and what to ask, as well as about what to record and how" (Hammersley & Atkinson, 2007, p. 35). In so doing, I was deciding what was relevant for the case and what was not, implying that the data collected was sampled from that available. A dilemma that influenced data collection was that whenever there was more than one conversation going on, especially near the nursing station, I had to decide which one to follow. This may have introduced selection bias. Although this was not done deliberately, after each observation session, I wrote reflective memos of how data was sampled for future guidance. Thinking through all the possible places where to observe, who to watch and deciding whether something is possible and productive to follow is a central tenet in fieldwork (Spradley, 1979).

3.7.7.3 Context

Although the different wards were all part of the paediatric setting, I could not assume that this was a homogeneous group and therefore, all four wards were studied in-depth. Sampling the dimension of context is as important as sampling time and people. Indeed, Atkinson and Pugsley (2005) affirm that context gives meaning to social actions and social identities. Participants may behave differently depending on where they are and whom they are with. This is reminiscent of Goffman's (1959) frontstage and backstage scenario. Goffman also warns that the use of places should not be mixed with context and that the structure of a building is merely a prop and does not totally influence the participants' behaviour. Goffman declares that if we are to avoid false generalisations about attitude and behaviour, the concept of social construction by those people who are acting in a particular context needs to be considered. This has been accomplished by observing participants while they move, over time, between different contexts that form part of their lives or their work (McDonald, 2005). Thus, when analysing data, phenomena need to also be considered within their social and cultural contexts (Atkinson & Pugsley, 2005).

Contexts sampled in this study included the interactions that professionals had during the unplanned day-to-day meetings. These interactions usually happened at the nursing station, corridors, treatment/examination rooms, staff room and offices and mainly involved dyads (a group of two people) of two different professions. Sampling of context also included when professionals met for the ward round. As will be discussed in Section 7.2, in this study, the ward round comprised of different stages which were enacted near and away from the patient's bedside. Ward rounds mainly involved the doctors and nurses. Other contexts were the multi-disciplinary team (MDT) meetings where professionals congregated to discuss patient care and these usually involved a larger number of different professions. Sampling happened *ad hoc* according to what was happening on the day of the observation, except for the ward round MDT meetings which were planned and held on specific days.

3.7.7.4 End of sampling process

Sampling was stopped when I acquired adequate insight related to the objectives of the study and when further observations did not yield any new data about IPC. This is when

saturation is said to occur (Bowen, 2008). Looking for data saturation requires that preliminary analysis has to be on-going during data collection.

In the coming sections of this chapter, the analysis process will be presented in Section 3.8, followed by a consideration of ethical issues in Section 3.9 consisting of six subsections (informed consent, privacy, avoiding harm, avoiding exploitation, consequences for future research, and thick description). Reflexivity will be discussed in Section 3.10 and the chapter will conclude with an introduction to examining the quality of the study in Section 3.11.

3.8 Analysing the data

Analysis is the process of transforming raw data collected by various methods into findings and results. In qualitative research, this process is a "highly interactive" one between data and researcher (Lofland, Snow, Anderson, & Lofland, 2006, p.196). Through this process, data are converted into broad categories or used to "identify essential features and relationship consonant with the" descriptive data (Wolcott, 2006, p. 23), thereby moving away from simple description to understanding and interpreting what is observed during data collection (Emerson, 2001).

Findings in qualitative research, although "skewed in the direction of induction" can also be extensions or refinements of pre-existing theories known to the researcher (Lofland *et al.,* 2006, p. 195). However, even if they are extensions or refinements of previous work, such connections need to be triggered by the raw data, giving special attention to analytical concepts that the participants invoke spontaneously and what Spradley (1979 p.95) defines as "folk terms." For the purpose of this thesis, the stance suggested by Lofland *et al.* (2006) was adopted. Therefore, analysis started off inductively by open coding, but informed by various theories. Symbolic interactionism (Blumer, 1969) was especially helpful when it came to understanding what meaning participants attached to symbols (See Section 3.3), especially language used and participants' behaviour towards one another. Goffman's (1959) social dramaturgical theory was then used to analyse and structure data.

A purely deductive analysis approach was not considered because this may bias the process and limit category and theory development. On the other hand, purely inductive analysis is mostly used when there is very little or no knowledge about a phenomenon (Burnard *et al.,* 2008), which is not the case in the present study. IPC is informed by research studies in adult healthcare settings and to some extent, in paediatric health and social care settings but not where children are hospitalised. The eclectic steps taken to conduct analysis were drawn from work by Lofland *et al.* (2006), Hammersley and Atkinson (2007), Agar (1996) as well as other qualitative researchers.

Although the following paragraphs were written in a linear fashion, in actual practice these following phases were done iteratively, having phases of data collection, initial analysis with open coding and back-to-data collection as suggested by Hammersley and Atkinson (2007). Table 3.3 shows examples of initial open coding (for codes see Glossary) with related excerpts. Qualitative analysis software NVivo 10 was used to organise my data.

Table 3.3 Examples of open codes and related excerpts

Open codes	Excerpts
Fragmented handover	*Sometimes yes, it affects, sometimes you get too busy and then* [it] *depends if the in charge* [nurse] *keeps on running to tell everyone, all the nurses to tell them the handover and then omissions happen you know, in that case.* **Formal Interview** *Like for example, the patient has intake / output chart and they don't mention it. You know, "Oh the patient is drinking." But they don't mention that it is strict intake output. You go near the patient after you check the piece of …, you know, the piece of paper. You put down the report like what you heard. And you go near the patient and you, "Ah." You see some nappies and when the patient, the mum asks you "Do I throw them?" and you don't know about intake / output. If you are one of those who says "Oh, it is not written, ok throw them." You could throw them away as well which is...* **Formal Interview**
Using the ward diary	*"I need to book a patient to be admitted in 2 weeks' time." The nurse takes a ward-diary from the desk and writes down this information. This is a ward-diary where the daily patient allocation is written down for the nurses but also used for any day cases or such information is written down.* **Observation Field Notes: 01** *There is a diary on the NS desk also known as the attendees' book where they write the admissions for operation in the coming days.* **Observation Field Notes: 36**

While looking at my data, I asked several questions, such as: *"What is this telling me? What is going on in this context?* and *"What is this an example of?"* (Charmaz, 2001; Cuba, 1988; Straus & Corbin, 1990). These were guiding questions rather than determinants of my analysis and helped me to understand the setting better. By using the data as a reference point, my observations and interviews became more focused as I was able to identify emerging patterns.

I also identified phenomena that were surprising and sometimes puzzling and attempted to clarify them either during the following observational session or through informal and formal interviews. I could do this since I always tried to write the extended field notes of one session before the next, and in most instances, I also started open coding. Puzzling observations were mostly related to my assumptions of how others behaved, based on my previous clinical experience and also previous literature.

After an eighteen-month period of this iterative phase, I moved out of the field and continued my data analysis by evaluating and writing down the findings. I began this period by immersing myself in the data and continued to seek any relationships between data collected from different sources, those from observations, informal interviews and formal interviews. The first step in the process of this period of in-depth analysis was to get to know my data more comprehensively. I repeatedly reread my field notes and interview transcripts collectively line-by-line and listened repeatedly to the interview recordings.

During the data collection phase, I had already found some preliminary analytical concepts to help me make sense of what was happening in this area. Throughout the iterative phase of data collection and analysis (See Figure 3.2), I also wrote down some methodological and analytic memos to explore the developing ideas. In my field notes I also noted down any quick decisions I needed to take while in the field (See Figure 3.3). These were at first written in the fieldwork notebook (as shown in the example), but later files were stored in the computer software used. Thus, by using the computer software NVivo 10 to manage my data, I continued with open coding and writing short memos as done at the beginning of my data collection. These short memos included my reflections on the data being analysed and also my reflexive feelings of what was happening in the field (See also Section 3.10 on reflexivity). Some of these memos were also initially handwritten in my field notes *in situ* (which I later highlighted in colour), but most memos were written in the expanded notes on the NVivo 10 programme after each observation session. Most reflection on the data was more feasible during writing the expanded field notes after the observation sessions as I had more time to think and write.

By using Agar's (1996, p. 183) "funnel" approach, I was initially writing notes about everything that was happening in the field as what might not have seemed so important at the time, might later make more sense and become important. During this phase of the analysis, I was also on the lookout for what was ritual or mundane while also being on the alert for those rare incidents that were unusual but which provided insight on what was happening in this setting. Thus, I was trying to make the familiar, strange and the strange, familiar (Garfinkel, 1967; Goffman, 1961; Van Maanen, 1995).

Figure 3.2 **Actions taken during the iterative phase of data collection and analysis**

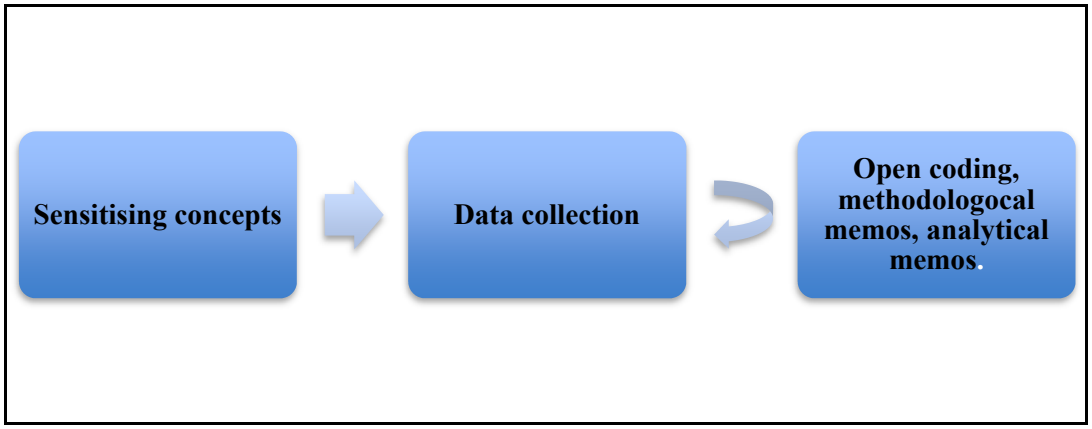
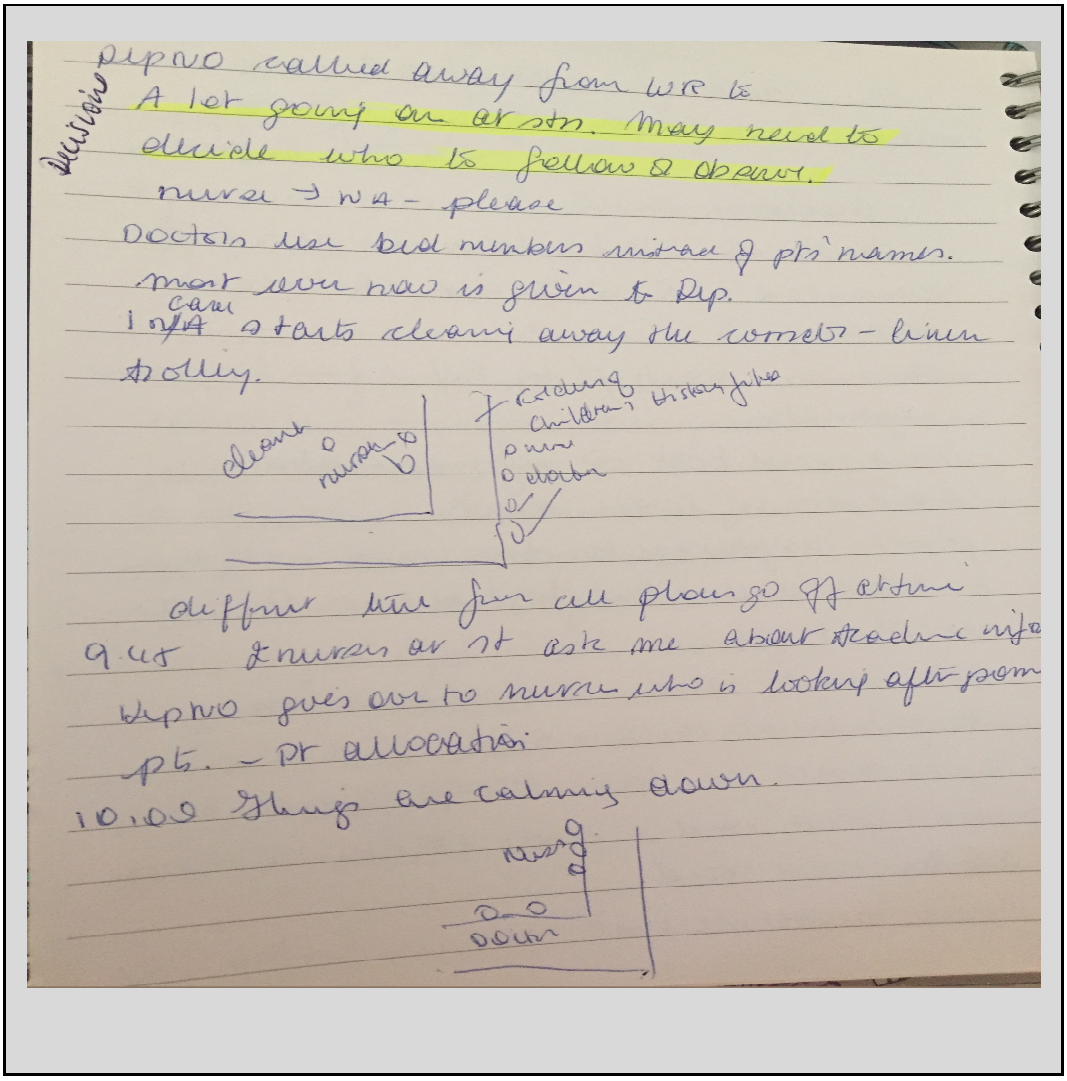


Figure 3.3 **Taking decisions while in the field (field notes page)**



In the beginning, I created 66 open codes (concepts). The next step was to begin developing categories by studying the codes and putting together those that were

related. This phase of "focused coding" was guided by questions such as, "What topic, unit, or aspect is this an instance of?" (Lofland *et al*., 2006 p.201). Figure 3.4 and Figure 3.5 show examples of how categories were developed.

Figure 3.4 Example 1: The process of developing categories

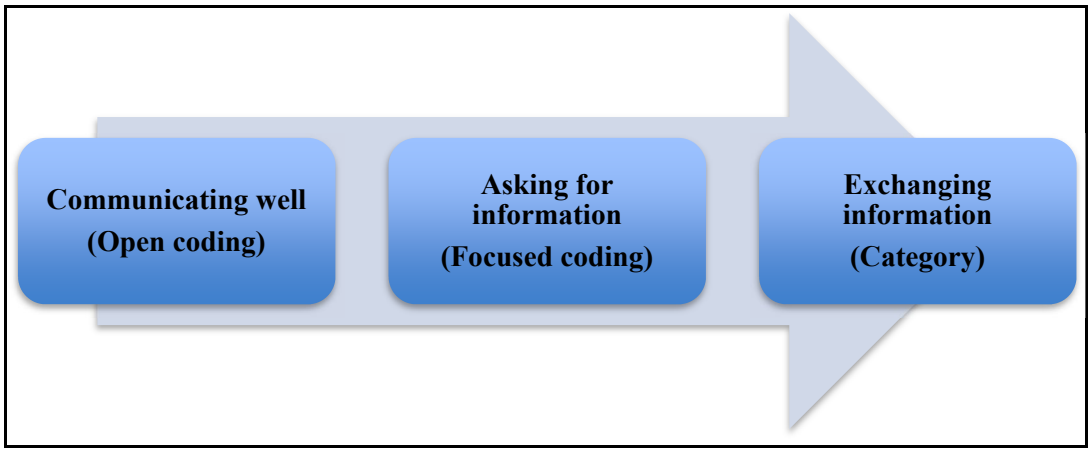
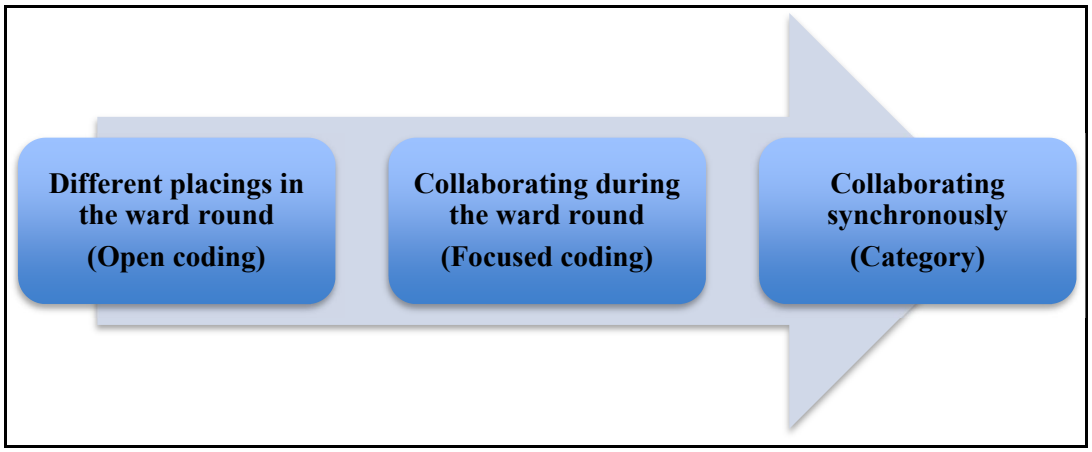
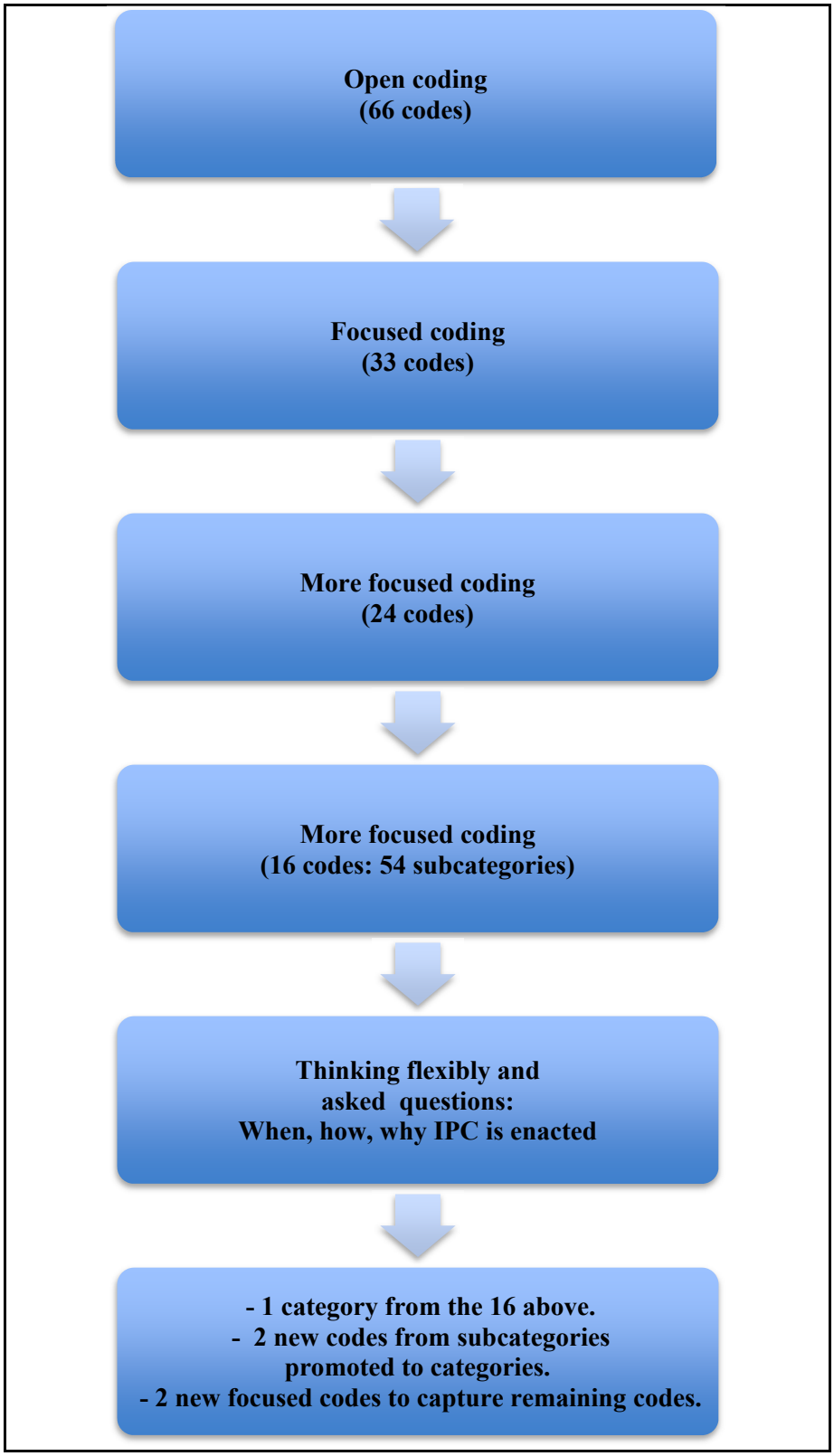


Figure 3.5 Example 2: The process of developing categories



Having answered the above-mentioned questions, some codes were moved as subcategories to other codes and some were moved under a new overarching term. This first concentrated the analysis to 33 focused codes. When repeating the process, the focused codes were reduced to 24 and then to 16 (with 54 subheadings). Gradually, analytic categories emerged. Figure 3.6 shows how the 66 open codes were winnowed down to 16 focused codes and ultimately, to the emerging categories.

Figure 3.6 **Winnowing down from open coding to the emerging categories**



The reason why I open coded my data was not to fragment it but rather to ensure that theory emerged from the data derived from the participants. Therefore, by looking at the codes, I tried to see what categories could be elicited to tell the story of how IPC was enacted in this setting. Questions that stood out clearly were: *"When is IPC enacted? How is IPC enacted? And, why is IPC enacted?* The other categories were left as they were, to see if they fitted into other categories that might emerge. Some of the open codes were not explored further because there was not enough data to support them and were shifted under one code (node in NVivo terms).

Therefore, I worked with those categories that were most relevant to my research question ***"How is IPC enacted in this clinical setting?"*** and its objectives. Emerging categories were analysed for their properties and interrelationships and further emerging memos written up. These memos helped to understand the data more and acted as the link between open coding and the final write-up of analysis (Charmaz, 2001). The process of constant comparison always guided the different phases of this iterative analysis (Burnard *et al.,* 2008). This entailed reading and re-reading the data corpus to look for and identify the emerging focused codes while at the same time searching to understand the meaning of the data (Silverman, 2005).

By this process, categories that emerged from the data were also linked to previously known literature, but some categories also directed me to other literature to help me understand my data more comprehensively. Whether analysing observation field notes or interview transcripts, the focus was always on actions and the connotations these evoked (Hammersley & Atkinson, 2007). I also needed to continuously be aware of the context in which these actions were performed.

Having established a manageable number of categories that related to my research question, analytic files were created for different relevant categories that were later developed into chapters. Another file that was included entailed descriptive aspects of the studied setting. These descriptions were written at the beginning of my data collection. Had I not decided on the basis of ethical concern to exclude detailed description, these descriptions would not only have substantiated my description of the physical setting, but would also have strengthened the fact that I was actually there (Lofland *et al.,* 2006) (See Section 3.9.6 on thick description). This may prove to be a

limitation to this study. Other files created in the NVivo 10 programme included any methodological and fieldwork challenges, such as ethical issues encountered during data collection.

The last phase in the analysis was to "think flexibly" (Lofland *et al*., 2006 p.217). These authors suggest using various strategies as the analysis is being developed. These are rephrasing, changing diagrams, constantly comparing, talking with fellow analysts (including the supervisor) and periodic distancing. 'Rephrasing' entails the rewording of certain questions asked or their answers during the analysis that might stimulate creative thinking. 'Changing diagrams' means continually adjusting all forms of diagrams until they actually represent what is intended. 'Constantly comparing' is the exercise by which emerging categories are compared to each other to stimulate new ideas (Glaser & Strauss, 1967). Talking and discussing with my supervisor and colleagues stimulated further thinking about what I was trying to achieve and helped me accomplish this.

During the above-mentioned phases, categories became more focused. Two subheadings, ***collaborating synchronously and collaborating asynchronously*** emerged as two main categories, together with the already existing category of ***exchanging information.*** This resulted in having three main categories. The remaining 15 codes (from the previous 16) became subcategories to two newly formed overarching codes; one for *codes (nodes) put aside* since they either did not have enough data to support them or they had the potential to develop into papers later on; and one for *codes that applied to all the other categories* that included subcategories that could apply to all of the main categories.

Figure 3.7 illustrates the three emerging categories while Figure 3.8 illustrates how the fourth category is linked to the other three.

Figure 3.7 **The three main categories**

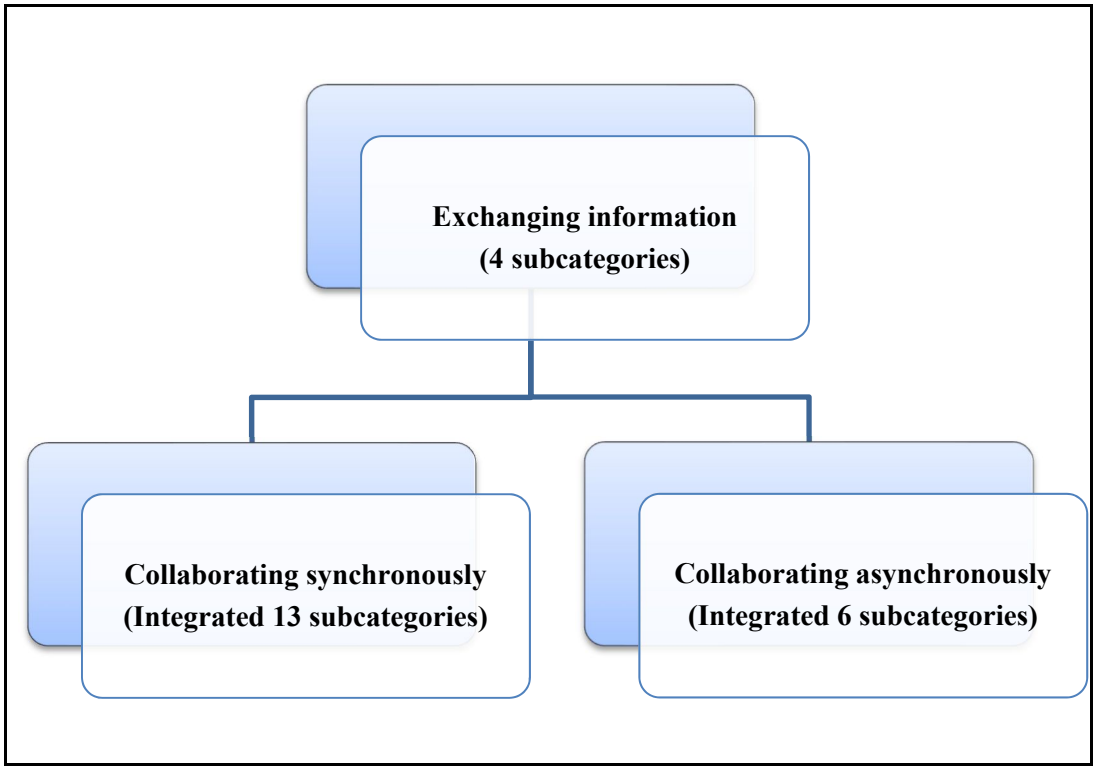
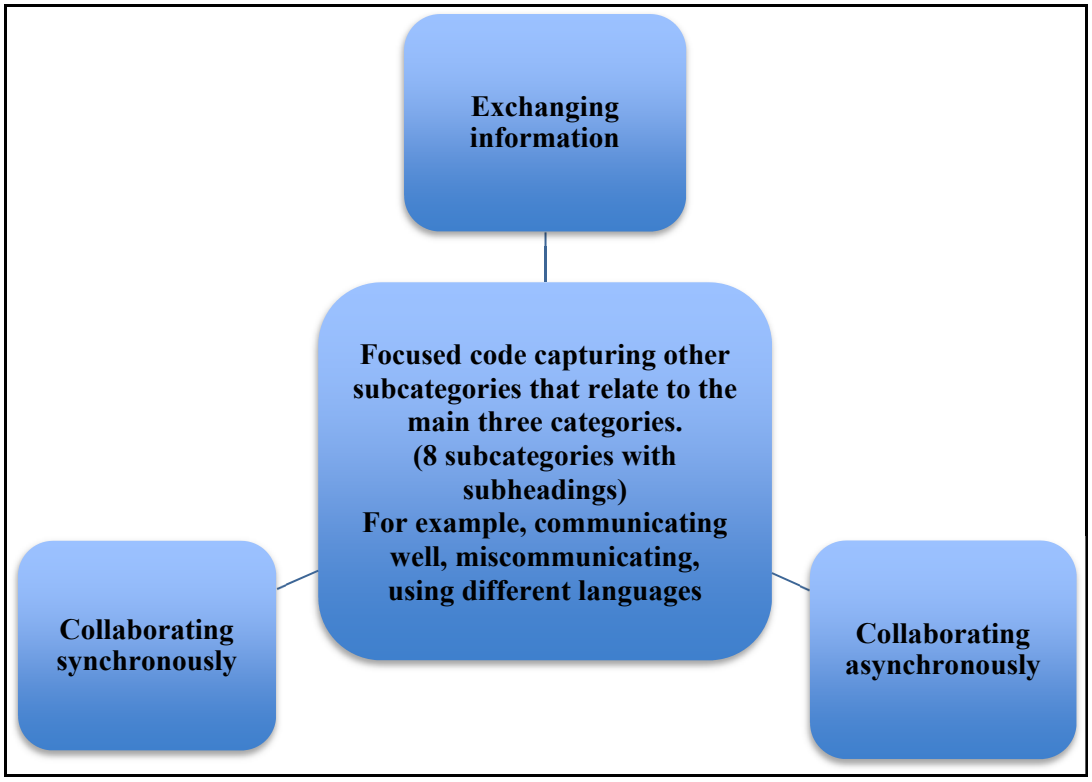


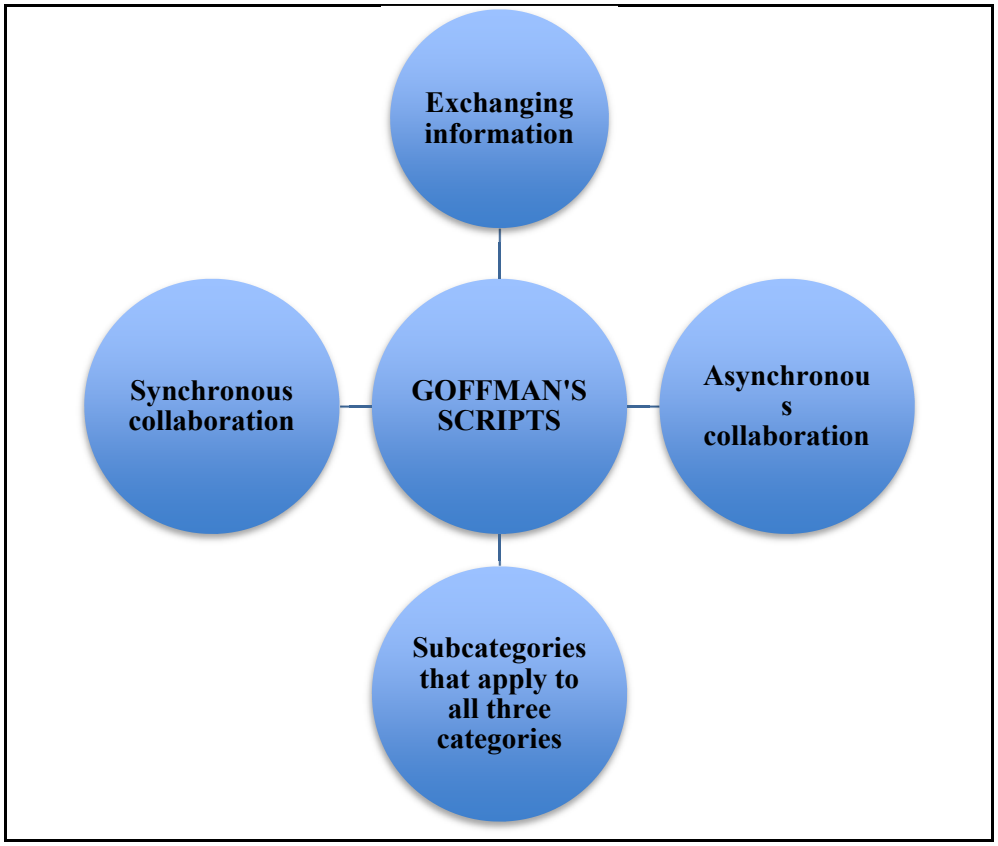
Figure 3.8 **The three main categories and the code that applies to all three**



The last strategy to thinking flexibly (Lofland *et al.,* 2006) was 'periodic distancing,' which is the act of creating a balance between staying close to the data and alternately detaching from the data. By doing this, I was able to consider what was emerging from a distance. During this phase, I took the decision to use Goffman's (1959) concept of scripts (See Section 3.4) to initially structure the write-up of the emerging categories and their subheadings.

Looking at the emerging findings through the lens of scripts also helped to gain insight into how, during different encounters, synchronous and asynchronous information exchanges played a central role when it came to enacting IPC in the study setting (See Figure 3.9). The decision to use the lens of scripts was taken knowing that researchers, "... must be prepared to go beyond the data to develop ideas that will illuminate them ... link [their] ideas with those of others ... [and] test their fit with further data" (Hammersley & Atkinson, 2007, p. 159). Ultimately, the lens of scripts helped to gain knowledge about why encounters happened in the patterned ways they did.

Figure 3.9 Goffman's (1959) script theory and its relation to the categories



3.8.1 Writing and presenting

Writing about the findings commenced during the iteration phase of data collection and preliminary analysis. Files were created in the NVivo 10 programme for each category mentioned earlier and for some of the other codes. These files, which were potential chapters in the final thesis, were developed to report key findings, supported by verbatim extracts from the interviews or observation field notes. Some of these files were put aside as they were not helping to 'tell the story' that was emerging but had the potential of being included as published papers at a later stage. (For example, the role of the ward clerk).

The selection of the categories and the significance allocated to them "is always going to be one of the most significant decisions that the ethnographer needs to make." (Hammersley & Atkinson, 2007, p. 194). Those files (categories) that were kept went through several iterations of writing until they developed in the findings' chapters (Chapters Four to Eight). Analysis and writing about the findings was "labour-intensive and time-consuming" (Lofland *et al*., 2006, p. 196) and for me, the hardest part of the thesis process. Writing about ethnography is not just a mechanical exercise, it needs to "describe the research process, on the one hand and its textual product on the other." (Hammersley & Atkinson, 2007, p.205).

3.9 Ethics

The Belmont Report identifies three principal moral standards that need to be adhered to when conducting research involving human subjects (Christians, 2000) namely; respect for persons, beneficence and justice. These standards will be discussed iteratively in this section. In ethnographic research, Hammersley and Atkinson (2007, p. 209) argue that one of the values pursued is that of producing knowledge, however, they continue that there are ethical issues to be considered and knowledge production is not a "goal [that] should be pursued at all costs." The ethical issues that they defined were namely; informed consent, privacy, harm, exploitation, and consequences for future research. These issues will be discussed individually in Sections 3.9.1 to 3.9.6.

By adopting this approach to ethical considerations, I used what Hammersley and Atkinson (2007, p. 219) identified as 'ethical situationism.' They argue that what is

appropriate or not, depends on the individual's judgment in context and weighing what action is beneficial or harmful to all participants, as well as to the researcher. It is essential that, whatever decisions taken regarding which action to adopt when conducting research ethically, no harm is inflicted on the participants at any point (Hammersley & Atkinson, 2007; Murphy & Dingwall, 2007).

It was expected that this study would pose minimal risks and at no time during the research process were participants deceived. At the same time, I was aware that observation and interviews may cause distress to vulnerable participants (Murphy & Dingwall, 2007). As a paediatric nurse and nurse educator, I was able to observe without disrupting the flow of work or doing anything that would make the environment unsafe. My professional code of conduct and embodied professional ethics meant that I was bound to respect patient confidentiality and was able to do this. I had professional insight, built up over thirty-nine years of nursing and teaching that informed judgements about when I should withdraw from a particular situation. One such occasion is described in Section 3.9.2 which considers the importance of privacy. I did not provide any patient care during the study, but had sufficient professional expertise and knowledge of local practices to raise the alarm correctly and effectively if a patient (or someone else on the ward) suddenly became unwell. It did not prove necessary for me to do this.

3.9.1 Informed consent

It is expected that in research, participants must first consent to being researched and that they do this without coercion, also being free to withdraw anytime they want (Creswell, 2007). In ethnography, where the researcher may be covert, participants may not be aware that they are being researched. Hammersley and Atkinson (2007, p. 210) argue that covert ethnography "contravenes human rights of autonomy and dignity." This is not the case in this study, as all participants were aware of the study being conducted. The following trail is how permissions and consents were sought.

Before asking for ethical approval from the University of Malta Research Ethics Committee (UREC) (Appendix 5) and the Faculty Research Ethics Committee (FREC) (Appendix 5), various approvals were sought. The request for approvals included information regarding the study and details of where I could be contacted if they had

any questions. Permission to conduct the research study was obtained from the hospital's Chairman of Paediatrics (Appendix 6), the Chief Executive Officer (Appendix 7), the Data Protection Officer (Appendix 8) and the Manager of Contracts Services (Appendix 9). The four Nurses-in-charge of the participating wards (Appendix 10) and the ten medical consultants covering these wards at the hospital also gave me their permission to be on the wards (Appendix 11).

When ethical approval was granted from the respective boards, a series of meetings was held to explain the purpose of the study to the different professions working in the study wards. Flyers in both Maltese and English (Appendix 12, English version), with an explanation of the research, were posted in strategic places on the wards, mainly on the notice boards that were accessible to everyone, including patients and families. The flyer included details of how to contact me if anyone did not wish to participate or decided to discontinue participating in the study.

All prospective clinician participants were given a personal letter of information (Appendix 13) and a consent form (Appendix 14) which they could return by posting it in a box held in the nurse-in-charge's office in each ward. By inviting them to post the consent form in the box, any member of staff could have opted out of participating without their colleagues knowing. They were given the option to agree to participate voluntarily or not with no presence of coercion (Christians, 2005).

Since some of the observations involved children, considered to be a vulnerable group, I made sure that written consent was received from at least one parent or guardian (Appendix 15) and from those children who were twelve years and over (Appendix 16) as per University of Malta ethics' regulations. In children below twelve years of age and who were cognitively able, I also asked for a verbal assent. I spoke to each patient before the ward round and gave them a letter of information and consent form in either English or Maltese (Appendix 17, English version) depending on which language they or their parents/guardians preferred.

Whilst anyone on the wards could have read about the study and asked me to leave (opt-out consent) some may have been unaware of the purpose of my presence, particularly since I probably appeared to them to be just another HCP. Therefore, I took active steps

to make sure that the HCPs who were the focus of the study and its data collection, were explicitly aware of the study and had given informed consent before I included them in my field notes. Other individuals who are constantly on the wards but not included in the study, such as the cleaners, were also verbally informed as to why I was there.

FREC assigned a local ethics supervisor for ethical support, in case I needed to discuss something urgently whilst collecting data in another country away from my academic supervisor. By giving her contact details on the letters of information, participants with any queries were able to contact the ethics' supervisor. They therefore had a point of contact with someone other than my QMUL supervisor or myself. The need to contact this ethics supervisor never arose.

Details of how I gained access to the setting and how participants were sampled have already been given in Sections 3.7.1.1 and 3.7.7.2. Issues of opt-in consent and the right to withdraw at any time may not always be straightforward (Coomber, 2002). However, I tried to achieve this by handing out the relevant information to all the clinicians who were regularly on these wards and by being available if they needed to ask any questions. In this study, the composition of the group varied in between sessions. Participants were verbally notified prior to each observation about the nature of the study. When a visiting clinician, who had not previously consented to participate, formed part of the team being observed, a written consent was obtained from him/her before the session began.

For those being observed, the issue of withdrawal or not participating could be resolved by also giving the participants the option of informing me that they would not like to be included. I was aware that this may have created a problem because participants were members of a group in the setting being observed and not separate individuals. However, I would not have taken field notes of the interactions involving them, if any of the participants had chosen to opt-out. There was usually more than one interaction going on simultaneously so I would have chosen to observe interactions which did not include anyone who had opted out. All potential participants consented to be included and returned the signed consent form. This could mean two things: they either opted-in because they were all interested and confident to participate or else the opt-out method that I offered was not viable, so nobody tried. However, I always asked everyone's

permission to be able to observe, especially before each ward round. I was always made welcome to observe. Those clinicians consenting to be observed also consented to the possibility of being interviewed. Before each interview, the interviewee was reminded of the ground rules such as, the issue of confidentiality and the right to withdraw and could ask for any of the information conveyed to be omitted from the data.

The participants needed to know what implications the study may have for them and how it would affect them (Christians, 2005). The method of observation may raise issues, such as observing unethical or unprofessional behaviour while in the field which often had to be resolved as they occurred (Punch, 1994, p. 84). Had such situations arose, then I would have taken action as bound by my profession as a nurse and reported such information to the respective responsible person/s. In the case of an emergency, such as if I had been present when a child collapsed, I would have reacted in the same manner that I would if I had been on the ward supervising students and started basic life support while calling for more help. I was not faced with any situations which needed further actions.

3.9.2 Privacy

Another guideline in the code of ethics involves privacy and confidentiality (Christians, 2005). In a small island as Malta, with such a small population, this issue needs to be given particular attention. One important issue in ethnography is that in the final write up, what was said and done in private may become public knowledge, which may result in undesirable long-term consequences (Hammersley & Atkinson, 2007). It is imperative that the identity of the participant is safeguarded and when possible, this includes the location where the research is being conducted.

In this study it is still difficult to guarantee that all identities were kept private. However, I tried my best at all times and took the necessary steps to deliver this.

Participants were offered to be interviewed in a place away from the wards but they all preferred to stay on the wards. To try to uphold anonymity of the ward, all data from the four wards were amalgamated. This could be done because observations revealed that data were almost similar from the four wards. In the write-up, attention was drawn when something affected one ward only, such as the fortnightly ward round MDT

meeting which is held in one of the wards only. The four settings were referred to as wards A, B, C and D.

For the sake of anonymity, at most times I did not identify the grade of the individual professionals but referred to them by their profession. When quoting HCPs which were few in number, such as the ward clerk or physiotherapists, I also refrained from using the profession and referred to them as HCPs. Therefore, when the term 'HCP' was used after a quotation, it refers to one of these professionals that are few in number, while when 'HCP' was used in text, it refers to all professionals including nurses and doctors.

As for the parents and guardians, no gender difference was made and the word 'parent' or 'guardian' was usually used when writing field notes so as to not reveal any information about the patients. This also meant refraining from giving thick descriptions of participants or events which could easily reveal the identity of the participant. The issue of 'thick description' will be discussed further in Section 3.9.6. Cassell (1978) asserts that the greatest risk in ethnography is most likely to emerge during publication. This has already been identified as a limitation when carrying out ethnography in such a small island (Section 3.5.1) and will be discussed further in Section 9.10.2.

Both the brief field notes and the in-depth field notes were kept in secure location for reasons of confidentiality. Also measures were taken to keep the names of the participants and their location anonymous at all times, even when writing these field notes. Indeed, the participants were not anonymous for me as the researcher, but I did my utmost to safeguard participants by continuing to adhere to anonymity in the final write-up. Christians (2000, p. 145) asserts, "Professional etiquette uniformly concurs that no-one deserves harm or embarrassment, as a result of insensitive research practices."

Ethical privacy also meant deciding, during the event, not to follow certain conversations or observations because they were either too personal or private for the participants, or the participants themselves showed me through their non-verbal cues that they needed privacy. Maintaining ethics also involved knowing when to take field notes and instances when to opt to not write anything. This usually happened when staff used backstage spaces, such as the staff room and sometimes the nursing station, to

process and share emotional experiences (Boyle, 2001). The following excerpts from my field notes illustrate this,

> *We are all standing at the NS when a nurse who works on this ward but is off duty approaches the NS with her husband and the staff who is there all gather round her. I could see that she has been crying. She has just attended a clinic and I sense that something has happened to this nurse and she is going through a rough patch, so I leave the NS to provide more privacy.* ***[Field notes: Observation 36]***

> *We are all at the NS. The consultant receives a phone call from theatre. He looks angry and addresses the two other doctors in an angry tone:*
>
> *Cons: "Did you not examine the patient before he went down to theatre?"*
>
> *Doc: "No, because he was reviewed by the surgeon, himself."*
>
> *Cons: "Well, apparently, the patient has an eye infection which you should have picked up and treated in the ward....."*
>
> *This is when the consultant and two doctors move from the NS to the examination room and when I made a move to follow them, they firmly shut the door, indicating that they needed privacy.* ***[Field notes: Observation 28]***

At other times, the ethical consideration of privacy was that of giving privacy and space to the patient and family in circumstances where I knew the family. The following is such an example:

> *At the NS, a nurse receives a call about a new admission, a 12-year-old Diabetic keto acidosis (DKA). All the nurses are on the alert as this is usually a critical patient. After a few minutes, the child walks in with his mother and brother accompanied by the A&E nurse. The nurses ask the family to go to the treatment room and the doctor also accompanies him. The patient being admitted is the brother of one of my present students, so I decide not to observe this admission. Instead, I stayed at the NS just in case I was needed.* ***[Field notes: Observation 07]***

3.9.3 Avoiding Harm

The standard of beneficence inherently includes the tenet of doing no harm. As already expressed, I did not expect the participants to come to any harm. However, I was aware that observation and informal interviews may cause distress to vulnerable participants, especially sick children and their families. Had I encountered any distress, I would have

immediately refrained from continuing that particular observation session or stopped the interview.

Publication of the findings "can sometimes have consequences, both for the people studied and for others." (Hammersley & Atkinson, 2007, p. 213). At the same time, Hammersley and Atkinson acknowledge that it is inevitable that certain findings may prove to be offensive to some participants. Becker (1978) advises that it may sometimes be necessary to refrain from publishing data that, in some way, may embarrass or distress those being studied, especially if this is not central to the purpose of the study itself. This is what I chose to do. Close attention to what was discussed was given. When I thought that an issue would cause anxiety or stress and/or may hurt participants' feelings, I either refrained from giving a thick description of the event or I avoided using verbatim extracts that could easily reveal the source.

3.9.4 Avoiding Exploitation

Avoiding exploitation includes the principle of justice. This study ensures that all participants had an equal opportunity to participate and to be represented in the final write up. Ways in which this was achieved were discussed throughout Section 3.7.7. Trust and betrayal was another theme that merited contemplation. On first entering the field, one of my goals was to gain trust from the participants (Punch, 1994). When it was time to leave the field and work on the data obtained, this was done in a way that participants were not hurt or betrayed. Being sensitive at all times and avoiding issues that might have breached their confidence achieved this.

As link lecturer for this paediatric setting, I continue to visit the location regularly and once this thesis is finalised, it will be made available for the participants. I will also make available any future papers that will be published as a result of this thesis and plan to hold meetings with different groups to present the findings.

Ultimately, the cardinal principle of accuracy was upheld to the best of my ability. At no point during the research process did I convey inaccurate information and I tried to be as loyal as possible to what data were observed and divulged (Christians, 2005). All possible steps to ensure this were taken at all times. This concept will be introduced in

Section 3.11, which focuses on quality in ethnography, and discussed further in Section 9.9.

3.9.5 Consequences for future research

Researchers carrying out ethnographic research or any other social research depend on gaining access to a setting. Therefore, when carrying out fieldwork, the researcher needs to think about the effect this has on the participants. Establishing a good rapport that results in a pleasant experience for the participants will potentially make it easier for other researchers researching the same setting in the future.

On the other hand, "Research that is subsequently found objectionable by the people studied and/or by gatekeepers may have the effect that these and other people refuse access in the future" (Hammersley & Atkinson, 2007, p. 218). The issue here is being ethically responsible towards researcher colleagues who may need to research the same setting. During my fieldwork, I did not experience any adverse events and I was always and still am welcomed on the wards. With the precautions taken in the writing phases it is hoped that this relationship will continue to be positive. However, I also need to be ready for any reactions from the participants because I cannot assume that they will look at the study in the same way as I have.

3.9.6 Thick description in this context

In Section 3.5, when examining ethnography, I indicated that in the final write-up, ethnography usually requires "thick description" including the participants' verbatim excerpts. The anthropologist Clifford Geertz (1973, p. 6) used the term "thick description" derived from the philosopher, Gilbert Ryle (1968). By "thick description," Geertz was referring to ethnography itself and "alludes to the situated, empirical description of peoples and races" (Rock, 2007, p. 30) and the "fine-grained analyses ... inside a group" (Fine & Weis, 2005, p. 80). Others have defined that using ethnography is an interpretive act of "thick description" (James, 2007; Spencer, 2007) and that writings in ethnography are therefore "interpretations of interpretations" (Denzin & Lincoln, 2005, p. 17).

Thick description is frequently referred to as being an account "densely constructed with graphic and detailed cultural descriptions." (Atkinson & Delamont, 2005, p. 832). Although this may be true, Geertz's (1973) notion of thick description goes beyond this. Ethnography has several viewpoints that inform what is being studied. From their viewpoint, Atkinson and Delamont stress, "It should include analytic attention to the multiple codings ... through which social life is enacted and represented." (2005, p. 832). It is also important that, if empirical research relies on the data collected to generate knowledge, in this case, interviews and observations, then "making ethnographic data more transparent should be of scholarly concern" (Reyes, 2018, p. 2). Some researchers even go as far as claiming that scholars should name the participants and the place of study in ethnographic work (Jerolmack & Murphy, 2017). However, as discussed in Section 3.9.2, in this study all possible precautions were taken to maintain participants' anonymity.

The setting of this study is an easily-identifiable hospital in a small island state, where anonymity and confidentiality issues may easily be breached and participants may become identifiable. Therefore, the objective of describing an event is not to reproduce it completely, "but rather to pick out its relevant aspects, details which can be extracted from the totality of details that make it up so that we can answer some questions we have." (Becker, 1996, p. 64). Reyes (2018, p. 2) argues that the most important issue is "how to make ethnographic data transparent" and presents us with a model to help us understand how to make ethnographic data more transparent by naming places and people as well as sharing data. I discuss this model in relation to my study in the next three sub-sections. I also outline the decisions I took during the research process to provide enough "thick description" to provide context to enable readers to fully understand the setting studied (Ray, 2011) while, at the same time, remaining loyal to my participants through my efforts to safeguard anonymity and confidentiality.

3.9.6.1 Naming places

Keeping places and people anonymous is common practice in qualitative research, although some scholars prefer to name places to anchor their findings to a specific historical time and place (DuBois, 1899; Zorbaugh, 1983). Other researchers "contextualise[s] the findings *vis-à-vis* history and regional cultures" (Reyes, 2018, p. 4). Reyes proposes three ways to name places: naming regions, cities and communities.

In this study, the reader knows the name of the island but the hospital and wards where the study was conducted remain anonymous. The "community" is known because the setting has been identified as the paediatric area within this hospital. This places the study in a historical time when the hospital was newly constructed and there was some reshuffling of hospital staff within the paediatric setting.

In line with "… maintaining broad anonymity and protection of participants" (Reyes, 2018, p. 4), this has been discussed in Section 3.9.2. In places where a ward was mentioned in conversation, wards were referred to as Wards A, B, C and D. I took this decision well aware that I might lose background information (Gieryn, 2000) because, despite being the same setting, these wards had some differences which will be noted when appropriate.

3.9.6.2 Naming people

It is common practice in most qualitative research to give pseudonyms to the participants to protect their identities and to prevent any future unintended harm. However, Jerolmack and Murphy (2017) argue that it may be more ethical to name participants as this gives them their own voice. In this study, I assured participants and the ethics committee that every effort would be made to protect anonymity of individuals to avoid detrimental repercussions. Therefore, to avoid individuals from being identified by fellow colleagues, I decided to refer to the individual participants by their profession's name unless mentioning the profession was likely to breach anonymity. For example, where participants were few in number, I referred to them collectively as HCPs.

When quotations from interviews were used, I did not identify from which interview it was taken, so it is harder for anyone to build participant profiles by collating their quotations. In the chosen excerpts, I also left out names of drugs specific to one ward to increase anonymity. However, in line with the argument of giving participants a voice, I included verbatim excerpts wherever possible.

3.9.6.3 Sharing data

Sharing of data is advocated "in the spirit of making ethnographic and other forms of qualitative work more transparent" (Reyes, 2018, p. 9). Reyes suggests that this may be

done in four ways by sharing **interview guides, transcribed interviews**, **methodological appendices** and **field notes**.

My **interview topic guide** is in Appendix 4. However, this is a high-level topic guide and the questions that were asked during the interviews are recorded in the audiotape and **transcriptions of the interviews** as raw data. These will not be shared as this would breach anonymity and confidentiality. The professional, bilingual transcriber signed an agreement (Appendix 18) to maintain confidentiality. Some preliminary transcriptions were shared with my main supervisor to evaluate content and the effectiveness of my interviewing.

Methodological information was not given as appendices but was given throughout this chapter so possibly, this is another way of sharing data. The section on reflexivity (Section 3.10), drawing from memos kept in the qualitative analysis software NVivo package and also in my field notes book, will also contribute to give a taste of the dynamics in the field and how my social construction influenced my work in the field.

Reyes' (2018) third suggestion of how to share data was to make transcribed qualitative interviews and field notes available to other researchers. Transcribed interviews were only seen by the transcriber and samples of preliminary interview transcripts as well as my field notes were shared with my main supervisor.

Field notes included those handwritten in a journal, which were later transcribed in the NVivo 10 software. They also included sketches of the ward layouts, used only for descriptive purposes and definitely not published or shared with anyone. Excerpts of the field notes were included in the write-up, strictly adhering to anonymity and confidentiality. These excerpts were written in italics just like the verbatim quotations. This helped me to differentiate from when I was describing things when I saw them *in situ* to when I was describing them at a later date, such as during analysis. Describing events *in situ* enhances "the process of 'being there' - participating and interacting with individuals over the course of events and through time - ..." (Reyes, 2018, p. 17).

3.10 Reflexivity

Reflexivity has two meanings in qualitative research. One denotes the reflection needed on one's own ties, values, ideologies or other personal characteristics that may influence interpretation. The other denotes the reflection needed on the methodology of the whole research process (Schwandt, 2014). Hardy, Phillips and Clegg, (2001, p. 533) assert that, "Reflexivity involves reflecting on the way in which research is carried out and understanding how the process of doing research shapes its outcomes." This involves not only becoming aware of what allows us to observe certain things but also what prevents us from seeing other things (Mays & Pope, 2000; Russell & Kelly, 2002). The more transparent the research process is, the more public it becomes and therefore more accountable (Finlay, 2002).

A crucial point in much field research is that the researcher is one single person and a lot depends on this individual (Mays & Pope, 2000; Punch, 1994). While researchers strive to ensure that findings emerge from the data and analysis, one cannot prevent this data and analysis from being influenced by the choices made by the researcher during the research process. Since I was the research instrument, I was in the field gathering data on my own; therefore, data collection and interpretation depended upon what I personally perceived of the situation at any given time. Moreover, this perception was influenced by my personality and prior experiences, and by how I interacted with the participants. This resulted in a write up that relied on my interpretation, influenced by what might filter through from my 'baggage,' unless measures were taken to ensure that the write-up represented the participants' voices. Therefore, I needed to be aware of my influence on the study and moreover, be conscious of the power relations that might have been at play between the participants and myself as a researcher and my other role as an academic. I did this by striving to ground findings in the data and supporting them with verbatim excerpts.

Delamont (2004, p. 226) states that, "the constant and tiring process of reflecting" is central to ethnography and that, "reflexivity is the most important characteristic of fieldwork and of analysis." It is part of the striving for dependability and credibility in the quest for trustworthiness and insists that the constant exercise of reflexivity should be present throughout the whole research process.

Interestingly, Ellis and Bochner (2000, p. 741) define reflexivity as a "personal tale of what went on in the backstage of doing research." What happened every day was very much influenced by the tacit skills and background knowledge that participants, as social actors, brought to the foreground during socialisation. This also applied to me as the researcher especially as I conducted the study in a familiar setting. Thus, I needed to make a special effort to temporarily suspend my tacit cultural assumptions (Atkinson & Pugsley, 2005). I did not plan to totally avoid relying on my tacit knowledge acquired through life, while at the same time acknowledged the effect I might have had on the enactment of IPC. Ultimately, I was part of the social world I was examining. By being aware of all this, I hope that my scrutiny of IPC enacted in this setting was described as it was actually enacted and not merely as my perception of it or even worse my expectations of what IPC should entail (Hammersley, 1992). However, I couldn't ignore my position in this study, as this would "discount a major component of the research process." (Rae & Green, 2016).

Throughout the research process I was aware of how I influenced and constructed the nature of knowledge. Reflexive consideration of my own role in the research process, especially during data collecting and analysis enhanced the "awareness of the subtleties of meaning of data" (Straus & Corbin, 1990, p. 41). To be more specific, my understanding of the literature on IPC and collaboration in general was influenced by my understanding of the complex meanings. These meanings were derived from field notes and transcripts and from my own experiences working in one of the study wards.

My first experience in the working world took place in a Special Care Baby Unit. Another working experience was in one of the paediatric wards from the study setting but in the old hospital. Despite being trained as a nurse in an environment where the medical model and patriarchal attitude was very evident, my work experience was different. The model of care in the paediatric areas was one where teamwork was paramount. We shared responsibility in the care-giving process. There were times when, as professionals, we did not agree on the care plan, but overall, our relationship was one of mutual respect. Therefore, I had a positive perspective towards IPC.

This thesis contains other background information about my present and previous professional work and how these may have influenced the research process. It

undoubtedly influenced the selection of the setting, but may have also influenced data collection, interpretation and analysis (Polit *et al.,* 2001). To add to what has already been mentioned, I am a Maltese woman and a nurse by profession. I have spent these last 23 years as an academic in a university. Therefore, my perspective on IPC through these different roles may have filtered through data collection and analysis.

During initial data collection sessions, I found myself being reflexive even while writing field notes *in situ*. This became rather confusing as, when referring back to the field notes, I questioned what resulted from my observation and what my reflexive reaction was. From that point on, I started highlighting my reflexive notes. On reflection, I decided to write my reflexive notes on separate pages of the notebook and after each session, they were recorded in a different file in the NVivo programme. For each observation session or interview, I kept separate reflexive memos. On reading these memos again after my discussion chapter, I could see how my initial thoughts about what I was observing filtered through in the final write-up. This is consistent with Hammersley and Atkinson (2007, p. 151) that reflexive notes are "written notes whereby progress is assessed, emergent ideas are identified, research strategy is sketched out, and so on." The example of a reflexive memo that follows contains a key emergent category in the findings chapters and also being reflexive about methodological decisions:

> *What was initially a synchronous collaboration among all professionals, turns into three mini collaborations with different professionals, forming the three collaborations. This shows that even when there are all the professionals, at times different groups need to focus on a certain aspect of the care delivered to the child. I had a dilemma which group to follow. Do I follow the nursing group where I feel most comfortable? Or do I follow a group which I have minimally observed? Next time this happens, I will observe professionals whom I have least observed or if by following one in particular, I would be following through the previous collaboration* **[Reflexive memo after an observation session].**

> *It is my feeling that handover is not being given the importance it should be given. There are too many instances when handover is given haphazardly along the corridor while walking, near the NS where it is very busy and with many distractions. Also, the one receiving the handover is often multitasking and not fully focusing on what is being said. To probe during interviews* **[Reflexive memo after an observation session].**

In tandem with these reflexive notes, I kept a fieldwork journal where I tried to capture how I lived this experience and involvement as a researcher (Coffey, 1999). These

notes were also sometimes written *in situ* to capture my feelings in real time and then transferred to the journal. The following excerpts represent how I felt before going for my first and some of the following observation sessions:

> *As I am preparing to leave for my first observation session, I think of what to wear. I feel I need to blend in with the environment and not stand out too much so that I don't attract attention and cause reactivity. I decide to wear dark clothes with a black and white spotted top* **[Field Work Journal].**

> *Influenced by the theory of symbolic interactionism, I need to give great attention to how I dress and behave in the ward. If, as individuals, we attach meaning to things by the way others behave towards us regarding that thing, then participants will create an identity (meaning) of me* **[Field Work Journal].**

> *Today is my first day of observation on Ward A. As I drive to work from home, I feel quite apprehensive. It is 6.30 in the morning and the traffic was not so bad. My thoughts as I drove included feelings of how the staff is going to feel having me around. I feel apprehensive especially with how the doctors are going to react … Will I manage to observe what I need to observe …? Will I have the energy to last for a whole morning of hanging around?* **[Field Work Journal]**

This is how I felt every time I started on a new ward or else allowed time to lapse between one session and another. I also felt this 'nervousness' before interviews, especially with non-nursing professions. I somehow felt more at ease with nurses, very likely since I am a nurse, myself.

My role as a researcher in this study was central. Being reflexive, writing reflexive memos and keeping a reflective journal helped to establish this role while at the same time, discovering new interpretations of the participants' experiences. In moments when I was not reflexive enough, and when I allowed my assumptions to seep into my work unknowingly, my supervisor would alert me with comments, such as "*How do you know this?"*

I believe that being reflexive and reflective, two crucial elements in qualitative research, warrants the central place I held in this study (Jasper, 2005). Every study is unique and reflexivity is essential, possibly enhancing understanding of IPC and the research process itself (Watt, 2007).

3.11 Quality in Ethnography

Ensuring quality in qualitative research is a way of showing the reader that the research findings of a study are worth their attention (Lincoln & Guba, 1985) and that they are also trustworthy (Thomas & Magilvy, 2011). Several authors from the qualitative paradigm have sought different means to achieve quality (Creswell, 2007; Denzin & Lincoln, 2005; Seale, 1999) and when they debate about which criteria to apply they sometimes disagree (Correa, 2013). This is due to the fact that qualitative researchers may be situated in historical "moments" (Denzin & Lincoln, 2000; Denzin & Lincoln, 1994). These historical moments offer a "diversity of frameworks available to researchers in which to locate their work." (Seale, 2002, p. 100). Terms that are often used to signal quality include authenticity, trustworthiness, and goodness (Tobin & Begley, 2004) or credibility, transferability, dependability and, confirmability (Lincoln & Guba, 1985). Section 9.9 will use Lincoln and Guba's four criteria of credibility, transferability, dependability and, confirmability, which they intended to be used as guidelines for assessing the trustworthiness of a study.

3.11.1 Conclusion

This chapter gave an in-depth account of the methodological theories that guided this study, namely constructionism, symbolic interactionism and Goffman's (1959) social dramaturgical theory. The complexities of ethnography were discussed, including the limitations to this approach. Ethnography, having participant observation as a central method of data collection, was complemented with formal and informal interviews. Ways of how ethical issues were addressed were also illustrated. A challenging issue related to this study is that of conducting a study where participants concurrently speak two languages and can code switch in one sentence. Ways of how I managed this challenge were presented. This chapter also included sections related to sampling and ethics. The eclectic steps adopted in the analytic phase were described in-depth and illustrated by figures and tables. In conclusion this chapter discussed how the practice of reflexivity helped in the quality of this study. The next section sets the scene for the coming findings' chapters.

3.12 Setting the scene for the findings chapters

The following five chapters (Chapters Four to Eight) present the findings from the analysis and evaluation of this study in relation to how interprofessional collaboration (IPC) was enacted in this paediatric setting. As discussed in Section 3.8, my analysis started inductively but was also informed by pre-existing theories known to me or triggered by the raw data. To ensure that the analysis was guided by the data, examples of transcripts from both the formal and informal interviews, as well as excerpts from observation field notes taken *in situ* were used. Table 3.4 is an annotation of data excerpts.

Table 3.4 Annotation to data excerpts

Symbols and notes	Meanings
[...]	Background information added to field notes taken during interviews to make the context clearer or words added to clarify meaning
…	Pause
(…)	Words or phrases edited out to be more concise.
<u>Underlined</u>	Emphasis
BOLD	Said loudly.
Italics	Verbatim excerpts from informal and formal interviews and excerpts from my field notes
Int	Interviewer
Cons	Consultant
Doc	Doctor
HCP	Healthcare provider

Adapted from (Atkinson, Okada, & Talmy, 2011; Willis, 1977)**.**

Names and any identifying information of the participants have been omitted from the quotations to help preserve anonymity. Thus, when using data excerpts, and in field notes, participants are referred to as nurse, nurse-in-charge, doctor, consultant and, for

smaller professions from which there is greater risk of being able to identify individuals, simply healthcare provider (HCP). Therefore, only in certain instances will the profession of the HCPs be revealed. A complete list may be viewed in Table 3.2.

The data corpus included field notes from observation sessions, divided between four clinical wards in one paediatric setting; semi-structured interviews with different professionals and several informal interviews with participants during the observation sessions.

Although there were other things happening on the wards during my observation sessions, I focused mainly on the events related to IPC and these were what I recorded mostly in my field notes. Through my observation, I could see that IPC was characterised by doing particular things while interacting. By looking carefully at these interactions, I could see that IPC in this study was enacted through ways in which participants exchanged information and built understanding with the use of electronic messages, paper documents, telephone conversations and face-to-face interaction; therefore synchronously and asynchronously. In their four-dimensional model for understanding the structure of collaboration, D'Amour, Goulet, Labadie, San Martín-Rodríguez, and Pineault, (2008) identify information exchange as one of the ten indicators for IPC (See Section 2.3.1).

The acts of information exchange observed in this study of IPC mainly comprised of; asking for information and associated responses, giving of information proactively, transferring of work and escalation of care, and two-way negotiation. These processes were enacted through synchronous (See Chapter Four) and asynchronous IPC (See Chapter Five). These chapters examine in detail how these acts during workplace encounters contributed to IPC.

Subsequently, IPC during these encounters was evaluated and analysed through Goffman's (1959) social dramaturgical theory, focusing mainly on the concept of scripts (Chapter Six). Also in Chapter Six, the categories of scriptedness will be analysed and examples of the encounters that invoked these scripts will be given. The examples include day-to-day unscheduled events, the ward rounds, the multi-disciplinary team (MDT) meetings, formal handovers, and clinical procedures.

However, some encounters, such as the ward round and the MDT meetings, were multifunctional and were found to have a spectrum of scripts embedded within a meta-script (Chapter Seven). Finally, a more analytical and detailed presentation of scriptedness will be given in Chapter Eight.

During the five findings chapters, I will also give examples of what could go wrong when scripts are "thrown off normal course" (Schank & Abelson, 1975, p.153), that is, when they break down and do not function as expected. Schank and Ableson (1975, p. 153) created a typology where they state that the causes why scripts break down may be "distraction," "obstacle" or "error" (See also Section 3.4). Although these occasions were observed infrequently, during their formal interviews three participants referred to such situations (See Sections 6.5, Excerpt One, and Section 8.2, Quotation Two for examples of these).

Having already noted that these were rare occasions, I felt it was important to include examples of broken down scripts in these chapters as these situations gave a more complete picture of how IPC was enacted in this setting. While examining the encounters where scripts had broken down, I inspected the reasons why and checked if these fitted into the typology given by Schank and Ableson (1975) or whether there were other reasons why this had happened besides the three causes given in the typology.

Therefore, the findings chapters will be presented as follows. In Chapter Four, I will explore the different functions of the acts of information exchange that can occur during different IPC encounters, whether they are synchronous or asynchronous but focusing more on the synchronous aspect. In Chapter Five, I will focus on how HCPs collaborated asynchronously. Chapter Six will set out contrasting categories of scriptedness and give examples of encounters when these categories of scripts were invoked. The multi-level scripts of the ward round and MDT meetings will be examined in Chapter Seven. Finally, Chapter Eight, will further scrutinise the different encounters given as examples in Chapter Six and Seven and the scripts they invoked.

Chapter 4 The constituent acts in IPC enactment

4.1 Introduction

In this study, the focus is on interprofessional collaboration (IPC). Information exchange is identified as crucial and is central to this study. This first findings chapter focuses on the main features of 'synchronous information exchange processes,' which, in turn, enact IPC and answers the question: **What are the main features of synchronous information exchange processes that enact IPC?**

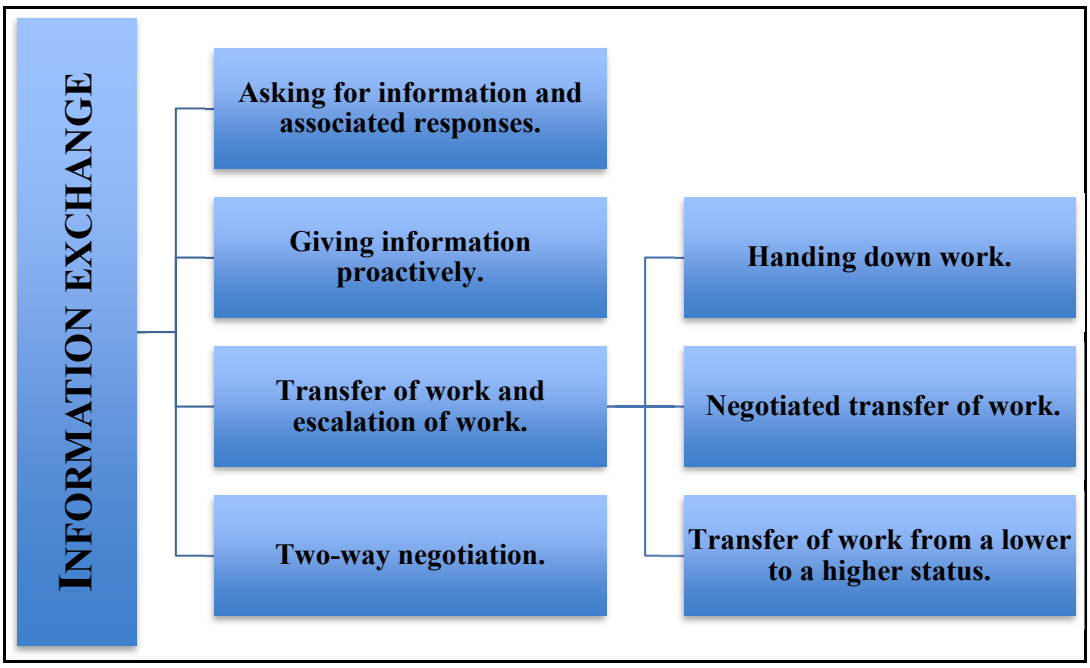
The main acts of information exchange by the participants who engaged in IPC in the study setting were as follows:

- Asking for information and the associated responses;
- Giving information proactively;
- Transferring of work and escalation of care;
- Entering into two-way negotiations.

These aspects are considered in more detail in Sections 4.2 to 4.5. These acts, apart from being constituents of information exchange are also interrelated. Therefore, some of the quotations used for one type of act may also be an example of another type of act. These acts will be explored in relation to how they contributed towards IPC and also what happened when they went wrong.

This information exchange is presented graphically in Figure 4.1.

Figure 4.1 The constituent acts of information exchange



Different professions enacted IPC in this setting and interactions were mostly observed between:

- Nurses and doctors;
- Nurses and pharmacists;
- Doctors and pharmacists;
- Ward clerks and nurses;
- Ward clerks and doctors;
- Ward clerks and physiotherapists;
- Ward clerks and play teachers;
- Nurses and physiotherapists;
- Doctors and physiotherapists;
- Play teachers and doctors;
- Play teachers and nurses.

These interactions predominantly occurred face-to-face in dyads of two different professions especially during the day-to-day interactions. However, there were occasions when three or more different professions collaborated in short day-to-day

encounters. IPC involving three or more professions occurred mostly during MDT meetings. The short episodes of IPC during day-to-day interactions were similar to Engeström's (2008b, p. 19) "knotworking." Moreover, professionals were also liaising synchronously by telephone and asynchronously through documentation. Asynchronous collaboration will be discussed in Chapter Five. Participants were liaising on the ward and with other departments, such as other paediatric wards, the breast-feeding clinic, the nutrition department, operating theatre, paediatric outpatients, pharmacy, the main administration office as well as the maintenance and equipment repair department.

4.2 Asking for information and associated responses

Although asking for information may seem to be a straightforward act when observed, on analysing it, asking for information and its associated responses can be quite a complex and calculated act that allows professionals to collaborate and signal that they wish to include others in their work. This was a common act commenced by any profession. The information sought ranged from mundane information, such as asking for a particular form requiring no verbal response, to more complex information regarding patients. The following encounter happened near one corner of the nurses' station (NS) desk, an area which is the ward clerk's domain:

> *Cons: "Do you have a form to request treatment from abroad?"*
>
> *And makes his way round the desk to the NS area. Although he did not address anyone directly, this was something the ward clerk usually took care of. The ward clerk stands up, looks for the form and the consultant also looks in the different files with different forms. The ward clerk finds what she wants.*
>
> *Cons to ward clerk: "Thank you* [addressing her by her first name]*"*
> *... and leaves with the form in hand* **[Field notes: Observation 6]**.

The consultant here was not acting as if he could not be bothered to look for the form himself, but was being respectful to the ward clerk by asking her where he might find the form. From the way the conversation developed and how the consultant addressed and thanked her, the consultant was respecting her role and working space, thus allowing her to contribute by finding the required form. Even though this was a simple task, by the way it was conducted, the ward clerk was made to feel part of the team, enhancing IPC. During our interview at a later stage, she expressed the importance of being a team player, no matter how small the contribution may be:

In other words, everyone helps. I believe that that is the most important thing; to have a person who helps and who doesn't keep on saying … "it has nothing to do with me and so I will not do it." At the end of the day, everyone is in the same place and everyone will, at some point, need everyone else **[Formal Interview: HCP].**

The episode above is an example of how IPC is enacted when there is respect between people. From previous observations, I knew that the consultant and ward clerk enjoyed a good working relationship. In other circumstances, where the relationship is not so good, a similar request may have perpetuated a hierarchical relationship.

On other occasions, professionals sought information because the actions and decisions they needed to take next depended on the information given. Furthermore, when individuals decided to ask other professionals for information rather than referring to a document or file, this sometimes presented an opportunity for more interaction and collaboration:

The healthcare provider (HCP) walks to the NS area, approaches the nurse and doctor who were informally talking and asks the following question:

HCP: "With regard to the patient in Bed 20, what has he been admitted with?"

Nurse: "Overdose ... why are you asking?"

HCP: "To give him something to do as he told me that he is bored."

Nurse: "As long as there is someone with him."

Doctor: "Tell him to remain in the room as I am coming to see him … [it is ok] as long as he remains in the room" **[Field notes: Observation 14].**

The HCP in this episode was not being lazy and knew that she could easily obtain the information required from the ward-round-book. Yet, she chose to speak to the nurse and doctor who were there. By interacting with them, she had the opportunity to elicit more expansive information about the teenager than she would have obtained from the ward-round-book. When interviewed later, the HCP stated that she usually started conversations with other professionals out of respect towards her colleagues and their authority. From my previous clinical experience and observations, I was also aware that

these professionals worked well together, irrespective of their status. In the subsequent interview this participant confirmed:

> *Yes, yes, with all due respect since you are going to talk to everyone … it is as if … you are not going to … keep … your level [struggling to find the right word and referring to status and position] … what occurs in the place of work is that it does not make a difference whether you are up there or down here* [**Formal Interview: HCP].**

However, in a different situation, this encounter may not have served to enhance collaboration but may have had detrimental consequences. The HCP in this excerpt was aware that she had interrupted the nurse and doctor at a time when they were willing to interact with her and had what Malec and colleagues (2007, p. 4) call "situational awareness." It is possible that at a different time as a HCP, she would have noticed that they were, for example stressed and therefore referred to the ward-round-book for the required information. When interviewing her, she emphasised the need to be sensitive to different situations, to respect and give space to her colleagues especially since she is a professional from a different discipline:

> *HCP: That is how it is but for example, I, for example* [repeated]*, one thing that I also take into consideration here is this – when a doctor comes in, my role ends there. I am going to leave the* [patient's] *room because the doctor needs his time with the patient.*
>
> *Int: Is this mainly during the ward rounds?*
>
> *HCP:* [Nodding her head in affirmation] *I go out* [of the room] *during ward rounds. There is no way I am going to stay [in the room] unless the doctor needs to ask me some questions.* [**Formal Interview: HCP]**

Therefore, the interruption by the HCP to prompt more expansive IPC could only work in a situation when the people being asked for the information had the capacity to respond. In situations where people were not in a position to respond, it could be damaging to workplace relationships as happened in another situation involving a different HCP:

> *The HCP is now sitting at the desk, trying to obtain some information from the nurse-in-charge about the patients before she goes next to them. But the nurse is very busy and asks her to use the ward-round-book and get information from there.*

The HCP does this, but still persists and consults with the nurse who really looks annoyed now and repeats the same instructions **[Field notes: Observation 38].**

This episode created a tense moment that could have affected subsequent interaction between these two professionals. I do not believe that the HCP's intention was to annoy the nurse. However, she could have been more sensitive, appreciated that the nurse was busy and avoided interrupting her. This kind of incident does not enhance working relationships and hence, IPC. I did not notice any further interaction between the two professionals for that day, as they both went their separate ways because they worked in different areas of the ward.

These examples of acts where information was being sought may also be occasions for seeking direction. The apparently simple act of asking for direction can also be more complex and influential than it might seem. Professionals may use such encounters to show readiness to share decisions with other professionals. The following is an example when a doctor and nurse were discussing a patient's treatment near the NS:

Doc: "Which lumen of the line [central venous line (See glossary)*] are we going to use today?"*

Nurse: "The red so that we obtain a blood culture." **[Field notes: Observation 28]**

In her response, the nurse was not only expressing her decision, but also giving the reason why she chose the red lumen; this may have helped to come across as less prescriptive towards the doctor. Providing a rationale made her professional competence and insight visible. It also opened up a space in which it would have been quite easy for the doctor to suggest otherwise if he felt there was no need for a blood culture at that time. What happened next was that the doctor and nurse continued to collaborate by sharing decisions. This happened backstage and informally near the NS, not in front of the patient and family. This encounter seemed to prepare them for when they approached the child and family in the treatment room, where they came across as decisive and professional when frontstage.

Thus, the acts of asking for information and responding are not simple acts. Asking for information can invite and enhance IPC, but needs to be well judged. Poorly judged requests strain relationships and IPC. The opportunity to respond to requests for

information allows HCPs, if they have the capacity, to demonstrate knowledge and willingness to collaborate.

4.3 Giving information proactively

The previous section focused on information which was given when it was requested, the most common type of information-giving. This section focuses on proactively-given information. Although this may seem like a simple act, giving information also involves complex decision-making or tactics from all professions. The information conveyed by individuals to other professionals ranged from simple to more complicated information. In the next excerpt, the HCP being interviewed answered the following when asked what she thought her role was in IPC:

> *HCP: And when there is someone* [a patient] *with temperature, I don't even finish them all* [taking everyone's temperature]*, I go straight away to tell the nurse. For example,* [the patient in] *Bed 4 has that much temperature … so that when they [the nurses] are going to give the treatment, they will know* **[Formal Interview: HCP]**.

Taking patients' temperature was not her usual role during day duties because there were other tasks she needed to do. But when on night duty, when there were less nurses on duty and she had more free time, the nurse in charge during that duty would ask her to take the children's temperature. Through this apparently simple act of IPC, the supporting HCP passed on clinically-important information to a nurse without delay. She did this promptly because it was important for the patient to receive treatment immediately to control the hyperpyrexia; but also because in entrusting her with this task, nurses were including her in the team caring for these children.

Giving information was also a matter of reporting pertinent information about patients so that everyone in the team became aware of the patients' situation. By sharing information about the patient and including the most important individuals for the patient, professionals liaised and discussed the best way forward for the patient so that together, they solved problems. In collaborating, they would achieve more than what one solitary professional alone achieves. The following is an example of this:

> *Nurse: When a child is in distress especially. You know? Immediately you should inform the doctors from his firm* (See glossary) *if* [he's] *available. If no, the doctor*

on duty. The nurse, of course, because we have patient allocation here, the nurse who is taking care of the child should know, of course, if she doesn't notice, in the first place. Usually she or he is the one who notices the deterioration or you know, the change of condition in the child. This is the first thing in distress, then the nurse-in-charge, of course, should know what is going on always so that the next person you should inform is the nurse-in-charge ... (...). But you know, people should know. (...) so that you have a team of people that will deal with the situation, because alone you cannot do anything. **[Formal interview: Nurse]**

These examples also show that it is important that professionals know their limitations, realise the urgency of the situation and are able to take prompt action. The HCPs who were observed usually reported to the appropriate professional who held a higher grade. The quotation above also stresses the importance of working in teams and sharing information. In the examples given, the actions taken needed further actions to be taken by another profession, indicating, that different professions depended on each other for information to be able to continue their work and this is all part of IPC.

The act of giving information proactively, at times could also be considered as giving direction. "Direction giving" script (Barley, 1986, p. 94) (See Section 3.4.2) could also be a transfer of work script (this will be further discussed in Section 4.4). Direction giving acts included professionals updating each other on their work and any other work that was required. This was sometimes more complex than it initially seemed. The simple act of giving information sometimes had other connotations, such as reminding other professionals about what needed to be done next, while at the same time including other professionals:

Doc: "I am going to the other section to insert a cannula (See Glossary)*, after that I have an admission and then I will come and see the X-ray. Give him [the patient] the nebuliser every hour. I will then come and review the situation and decide how we will continue from there. Am I right in saying that the X-ray is not ready?"*

This reminds the nurses that they need to alert the radiographer. The doctor then repeats the briefing about the new admission to another nurse **[Field notes: Observation 13].**

In the above excerpt, the doctor was not just giving information on what she was about to do but also stating loudly what needed to be done for the newly admitted child. At the same time, by saying "we," she was attempting to invite the whole team to participate in

what needed to be done. Nevertheless, she was very much in command of the situation and through her statement, she was also reproducing the social order of this encounter affirming her status as a doctor in the hierarchy of the organisation. Whilst declaring what she would do next, she was also reiterating what was required and priming others to prepare for that.

Sometimes, individuals, usually a doctor or a nurse, gave information to no-one in particular but stated it loudly so everyone in the group near the NS could hear. From my observations, when this happened, I could see that the different professionals in the group picked up the work being delegated or implied. This may be part of an "escalating scale of obligation" (Darr & Pinch, 2013, p. 1613) mentioned in Section 3.4.2, where such interactions are a continuation of the ward round encounter and how an encounter may have different phases, until the obligation of care for the patient is accomplished. The following excerpt is an example of this:

> *Doctor to no one in particular: "So the psychiatrists are coming!"*
>
> *And says this in a deep solemn voice while imitating the psychiatrist who had been at the other end of the phone. The others laugh.*
>
> *Doc: "Let me know when they come."*
>
> *The nurse-in-charge nods her head in affirmation.* **[Field notes: Observation 14]**

At other times professionals stated out loud the treatment a patient was being given so in this way, they were double-checking themselves with others in what they were doing. The following excerpt is an example of this and shows that nurses also took the opportunity to subtly indicate to the doctor what needed to be included in the notes with regards to the child's treatment. This may also form part of a direction-giving act:

> *Nurse-in-charge to another nurse in the presence of a doctor: "Let me see if I can give him a paracetamol gargle as his throat is very bad. If it does not improve, we can try to give him Voltaren* (See glossary). **[Field notes: Observation 36]**

None of the medications mentioned were prescribed on the patient's treatment chart so, in this way, the nurse was indicating to the doctor that he needed to write up these prescriptions. The above quotation indicates the responsibility that professionals took

when there was a change in a patient's condition and how they subtly suggested to other professions, in this case the (higher status) doctor, what other treatment the child needed to be prescribed. This highlights the importance of effective communication between professionals to ensure safe medication (Stewart, Purdy, Kennedy, & Burns, 2010). Indeed, what happened in this information-giving encounter prompted the doctor to write up the two drugs mentioned. The collaboration achieved here was that of individuals from different professions respecting and helping each other to solve problems and provide a service to the patients.

Thus, giving information proactively sometimes also involved complex tactics, especially when this information prompted other professionals higher in status to take further action. Some of these acts were reminiscent of the 'doctor-nurse game' coined by Stein (1967) and Stein *et al.* (1990), showing that this game was still being played.

4.4 Transferring of work and escalation of care

Transferring work and escalation of care are important features of IPC and are centred on provision and exchange of information. Transfer of work occurred in three ways:

- Handing down (delegating) work from a higher to a lower status profession (the most frequently occurring type of transfer);
- Negotiating transfer of work between two teams or professionals of equal status;
- Transferring work upwards from a lower to a higher status profession, including escalation of work.

When work related to care is transferred from one person to another, the possibility of communication error increases because important information may be lost in transition (Horwitz, Krumholz, Green, & Hout, 2006). Care or treatment can be delayed or missed altogether as evidenced by this nurse's quotation:

> *(...) sometimes it does happen that the handover and other similar things do not take place and that means that sometimes things are skipped* [not done] **[Formal Interview: Nurse]**.

This implies that decisions taken during ward rounds are not always handed over, suggesting that it is best for the nurse looking after the patient to be present during the ward round or when decisions about her/his patients are being taken so information is given first-hand as one doctor emphasised:

> *(...), and obviously we would like the nurses to be with us (...) so that they know exactly what is happening first-hand rather than we have to, sort of, re-explain things afterwards (...) and we can tackle problems there and then, if possible.* **[Formal interview Doctor]**

This doctor not only highlighted the desire for nurses to be present so that they receive 'first-hand' information, but also for nurses to contribute to problem-solving, an essential part of IPC.

4.4.1 Handing down work

Transferring of work occurred mainly from professionals of a higher status handing down work to others in a lower status through delegation, as for example:

> *They all gather at the NS and conduct social chitchat. There are the nurse-in-charge, another nurse, two doctors and the ward-clerk.*
>
> *Nurse-in-charge to other nurse: "With regard to Number 14* [patient bed number] *let's take an 'RSV' swab* (See glossary)*, we will make an outpatient (OP) appointment for him on Tuesday and he can go home."*
>
> *This is the briefing from the last consultant's ward round.* **[Field notes: Observation 14]**

This information triggered a cascade of expected tasks which were relayed by the doctors to the nurse-in-charge during the ward round and then redirected to a more junior nurse. When following up this episode, I observed that the booking of the outpatients' appointment was then transferred to the ward-clerk. This episode may also be a result of each professional knowing what their contribution towards providing a holistic service to the patient is and so, professionals took up the indicated instructions and implemented the tasks. It is also a matter of professionals understanding their role in IPC.

Handing down work may have a negative connotation to it and put a strain on IPC because not everyone accepts this willingly. Sometimes those lower in status roles might protest when work is handed down to them as happened next:

> *Nurse to nursing assistant: "Can you escort this patient to theatre?"*
>
> *Nursing assistant: "I am making beds at the moment."*
>
> *Nurse: "No, no. Take the patient to theatre."*
>
> *Nursing assistant* [In an angry tone]: ***"Give me the patient's notes then and tell me which theatre number."***
>
> *The ward-clerk gives her this information and hands her the patient's notes* **[Field notes: Observation 34].**

This episode started with the nursing assistant primarily protesting against the nurse's authority and decision. The protest could have been because the nursing assistant had a task to do in an already busy morning. On following up this incident, I observed that the nursing assistant focused her brief protest only on the nurse because she diligently escorted the patient to theatre.

4.4.2 Negotiated transfer of work

On other occasions, there was more emphasis on negotiated transfer of work and this mainly happened between two medical teams (firms) or professionals of equal status. Negotiating work transfer may be part of a good collaboration. Different firms, especially those working in the same ward, need to collaborate not only to enhance the outcome of care to patients but also to help in the overall smooth running of the ward. For example:

> *Cons:* "[Consultant's first name] *do me a favour? A patient* [and tells him his surname] *should be coming for us to carry out some blood investigations. Can you take the bloods as I have to be in another ward?"*
> *The other consultant agrees to do this. The first consultant gives the other consultant the sample bottles and relevant papers and also instructs the ward clerk about this patient so when the patient arrives she informs the other consultant* **[Field notes: Observation 8]**.

This negotiation enabled the consultant to continue with his work on the other ward without interruption and was an example of two firms collaborating. This work was transferred smoothly from one medical firm to the other.

Escalation of care may be considered as part of negotiated transfer of work although the professionals who escalate care often continue to be part of the team delivering care especially nurses. The following data illustrates this:

> *The junior doctor* [a female] *is worried about one particular patient who looks critically ill and so decides to call the consultant* [male]. *When the consultant comes, the doctor briefs him about this patient and they go and review the patient. The nurse who was listening to this conversation and was looking after the child also accompanies them. The consultant comes back to the NS and phones another consultant who specialises in the condition they suspect that the child is suffering from. When the specialist consultant comes over, they review the child together and decide to transfer the child to the specialist's firm*. **[Field notes: Observation 12]**

In negotiating the transfer of work in the above excerpts, professions were collaborating by showing collegiality and mutual respect of different expertise, thus enhancing collaboration and potentially resulting in a better quality with a more specialised approach and better continuity of care for the patients. Specifically inspecting the positive outcomes of IPC on patient care was not part of this study, however, because of my clinical background and informal conversations with the parents of the hospitalised children, I developed the opinion that when IPC was enacted, patients and parents appeared to be more satisfied with the service delivered. Of course, this opinion would need following up in future research.

4.4.3 Transfer of work from a lower to a higher professional status

The following excerpts are examples of transferring of work from a lower to higher status professionals. Escalation of care mainly happened when the patient's condition became more critical or when the ward became busy. This involves two nurses of different status; indeed, most negotiated transfer is intraprofessional (See glossary). However, there is also a strict hierarchy for escalating within profession until a certain level of seniority (or urgency) is reached before referring to other professions. For example:

> *Nurse to nurse-in-charge: "The new admission is still on oxygen because as soon as you remove the mask his saturations go down to 92%. Can I leave him in your hands, as I need to see to my other patients' treatment and vital signs? The doctor is already there with the patient if you need help."*
>
> *The nurse-in-charge goes to the examination room to check on the new admission* **[Field notes: Observation 4].**

The nurse handing over the newly-admitted patient did this by first highlighting the critical condition of the patient and the reason why she was transferring work. By giving the reason, the nurse was contextualising and justifying her action. Convinced, the nurse-in-charge willingly accepted this transfer of work from a junior nurse.

Transfer of work from lower to higher status professions and escalation of care does not always run smoothly. Whenever a patient's condition becomes critical, the plan of care changes and therefore individuals higher in status are called to review the patient. Professionals higher in status do not always willingly accept work from lower status colleagues. The following data illustrates this:

> *Int: In other words,* [what you are referring to is that] *there would be those who do not respect your opinion?*
>
> *Nurse: Well, we had cases where … I mean, somehow with your persistence … I don't know, I remember a case of … we had that* [case of] *encephalitis. It was as if, me too, because of the mother, I saw the mother's concern because then I, I was (...). When I saw that the mother was also concerned. I mean, because at the beginning the doctors did not want to do anything.*
>
> *Int: You took action.*
>
> *Nurse: But because she already was … when she [the patient] was younger she had the problem [symptoms similar to the present one] and because of that … it is amazing how much I insisted. I mean even the consultant, at first it was as if he did not want to take action. He told me, "She doesn't have it* [encephalitis]*" But then he transferred her to another consultant* [uses first and second name]*, she ended up in ITU. God bless, in other words, she* [the patient] *did not have anything* [as side effects].
>
> *Int: How did things turn out for her?*
> *Nurse: No,* [she was] *all right then.*
>
> *Int: All right?*
>
> *Nurse: But it is important that we also take it upon ourselves to think. If we have any doubt on something,* ***you have to*** *...* ***you have to take action.***
> **[Formal Interview: Nurse]**

The persistence of the nurse in the above excerpt was perhaps mainly due to her being a senior nurse with a lot of experience. By listening to the child's mother and reaching her own conclusions from observing the child, she persistently emphasised the need for

escalation of care until this was taken up. On the other hand, the doctors were "pattern matching" (Tower & Chaboyer, 2014, p. 3) when trying to diagnose the patient and were misled. Pattern matching will be discussed further in Section 6.2 when discussing strong scripts. This incident involved two different professions; both practitioners senior in grade and this may have influenced the outcome of this exchange. This was an atypical situation, perhaps the result of work pressure. I did not observe such situations directly; this incident was narrated in one of the formal interviews. Nonetheless, it could also be an issue of power, which is not so uncommon in similar contexts. The consultant and other doctors, who are traditionally further up the hierarchy, perhaps did not accept being challenged by a nurse. It was a medical decision not to escalate care initially. However, persistent IP efforts reversed that decision and thereby provided safer care for the patient.

It was also observed that when the ward became busy, work that was sometimes done by nurses e.g. drawing of blood samples, was then transferred back to the doctors. Another example of work being transferred to others of higher status and from a different profession, is in the following excerpt where the doctor was a junior one:

> *One nurse is busy concluding files of the discharged patients and liaises with the ward-clerk. There are different professions around the desk at the NS.*
>
> *Nurse to junior doctor: "This is* [waiting] *for the discharge letter."*
>
> *And hands him the patient's notes while she continues to close the other files.*
> **[Field notes: Observation 34].**

By telling the junior doctor what else needed doing, the nurse was subtly telling the doctor what to do, while still helping him with the other files. This was all part of providing a service to patients and helped in progressing the day-to-day work of the ward, implying that IPC is enacted through both simple and complex acts of information exchange.

Thus, transferring of work and escalation of care can serve to increase collaboration, especially when professionals willingly respected and accepted each other's roles and worked together. However, it may also create reactions and negative emotions when transfer of work is not willingly accepted or when power and hierarchy are protected.

4.5 Two-way negotiation

In this setting, two-way negotiation in the form of a discussion was observed face-to-face and over the telephone. This was either between two different professions, or members of the same profession, hardly ever having three or more professions involved at once, except during the MDT meetings. The IPC being examined here presents a greater element of negotiation between different professions, more than the negotiation that happened in the acts of asking for information, giving information and transferring work. Two-way negotiation acts helped participants to take collective decisions about the plan of care; as in the example given below:

> *The nurse and the two doctors discuss the treatment. It is an unusual dose so the nurse tells the doctor: "I need to check with pharmacy that this medicine is available in that dosage."*
>
> *Doc: "We have already checked with pharmacy."*
>
> *However, the nurse went to check anyway. This annoys the doctors and they mumble something which I cannot hear clearly. The nurse comes back satisfied that it is available. Together, they write down the prescription with the nurse making sure it is written clearly for the other nurses to follow through.*
>
> *The nurse tells the doctors: "I will also write instructions in the nursing report for the other nurses."*
>
> *The doctors say nothing* **[Field notes: Observation 2].**

I think this excerpt offers a subtle insight into the issue that most people do not know what other people (need to) do (The importance of understanding each other's role was discussed in Section 2.6.6.4). This example of the doctor being put out by the nurse talking to pharmacy is a classic. The doctor seems to have no idea of how disruptive an unusual dose of a medication can be in a system – so does not factor it in. The nurse, on the other hand, is acutely aware and makes sure that the whole 'down-stream' trail is informed. When the nurse said she would check the dose with pharmacy she was also bringing the unusual dose to the attention of the doctor. Putting the interest of the patient first, she persisted in checking with pharmacy, bringing another profession into the collaboration. By further discussing the prescription with the doctors, and making sure it was clearly written for the other nurses, she showed willingness to negotiate and

collaborate. This episode also shows the interplay between synchronous and asynchronous collaboration when the professionals involved follow up the discussion with written documentation.

Discussions with different departments tended to be held over the telephone while discussions between professions of the same department were mainly held face-to-face and generally followed by other means of communication, such as documentation. This will be discussed in more detail in Chapter Five. Sometimes, the interaction started over the phone and then continued face-to-face. Several participants, when interviewed, highlighted the importance of collaborating with other departments. Collaboration and negotiation between departments enhanced the day-to-day running of the wards and helped management in better planning of admissions and monitoring bed state, an issue that usually caused problems especially when the wards were overcrowded.

One such issue involved planned admissions from other wards, such as the neonatal intensive care unit (NICU). In the following quotation, a nurse talks about the importance of collaborating with other departments, such as the detox department, involved in cases of babies with withdrawal symptoms related to illicit drugs taken by the mother during pregnancy.

> *Because you then know what there is and what there isn't. Because we even give them feedback on what we have here in the ward, ... and we would even know ... for example, when we have someone with NAS (Neonatal Abstinence Syndrome), it is required, so to speak, that first you need to call them and they, the social workers then give us feedback on what they want us to do. For example, today we had one ... because now we are keeping the babies for a week after they are born to see whether or not the NAS will develop* **[Formal Interview: Nurse in charge].**

The detox department held frequent meetings outside hospital with stakeholders to keep track of drug abusing mothers who were about to deliver their babies or who had already delivered them. Through liaising with the other departments, different professions from various disciplines came together to plan the best way forward for these babies and their families. Although decisions were taken collectively on how best to solve these problems and provide the best service, the mothers were not involved in these meetings, an issue that might reduce the effectiveness of care planning and implementation. However, the mothers were followed up and kept informed by the

social worker and the obstetrician and these two professions acted as agents between the mother and the rest of the team. Thus, collaboration may start in one place and continue in another and not necessarily happen in one event.

It was observed that during negotiations such as in MDT meetings, professionals were interacting more and taking collective decisions, a very important aspect of IPC. This allowed trust and respect to be developed among colleagues, encouraging further collaboration and a sense of helping each other. Parents might also join MDT meetings, usually once the professionals have formulated a preliminary plan. Parents are then asked if they agree with the plan which might change accordingly. Discussions among professionals were on-going and continued outside MDT meetings as exemplified by the following:

> *I obviously follow up by asking them for questions and they ask me too. They call me as soon as they have a difficulty. In other words, even if it is not my case but they need to ask my advice, I am there to help them*. **[Formal Interview: HCP]**

Sometimes, IPC breakdown results from insufficient negotiation or poor negotiation skills that leads to tasks not being completed. Indeed, information exchange, one of the main indicators for collaboration (D'Amour *et al*., 2008) (See Section 2.3.1) relies heavily on good negotiation and communication skills and also the good fortune of not getting unavoidably interrupted.

Professionals were normally ready to negotiate and persevere in their task until they solved the problem or repaired the collaboration:

> *A nurse is checking with pharmacy regarding a medication-Flagyl (See glossary) - to see whether this needs dilution. She had asked the doctor who said to better check with the pharmacy. The nurse gets slightly annoyed with pharmacy as they told her that they would get back to her with an answer. When she sees that no one phoned back, she phones pharmacy and this time she gets an answer* **[Field notes: Observation 13]**.

IPC here was set up by the first phone call and they had agreed that the pharmacist would phone back. Observations for this study and my wider knowledge of this clinical area (See Section 3.6) suggest that it would be reasonable to assume that the pharmacist would have phoned back eventually. For some reason, s/he did not phone back

immediately (s/he may have been busy in the middle of something or was dealing with problems, chronologically). The nurse restarted and repaired this stalled collaboration by phoning back and getting the information needed.

When someone in the team delays collaboration and breaks negotiations, this may create an emotional response, such as the nurse in the above excerpt and also the nurse who was trying to escalate care in Section 4.3 (Excerpt Two). In turn, this may create friction, fragmentation of care and interruption of service. By phoning back and repairing the collaboration, the nurse in the excerpt above could continue with providing a service to the patient. On the other hand, the pharmacist at the other end of the phone may be unhappy for being interrupted twice and having to make the pragmatic decision to deal with this request out of sequence. Therefore, being sensitive to the other professionals' needs is also an attribute of IPC.

Thus, the act of two-way negotiation is more conducive to shared decision-making. This act served to negotiate patient care and treatment, to solve problems and repair collaboration.

4.6 Conclusion

Although there are several functions of IPC (D'Amour et al., 2008), my focus in this study was on the central role information exchange played in enacting IPC. Information exchange relies heavily on good negotiation and communication skills, and perhaps not getting unavoidably interrupted. As mentioned above, the main acts in the IPC observed in this study were namely; asking for information and associated responses; giving of information proactively; transferring work and escalation of care; as well as two-way negotiation. These acts were mainly happening in dyads of two professions, except for during the MDT meetings when more professions were involved. The acts of information exchange may look simple at first, but on closer analysis they can be complex and calculated acts.

Observations showed that certain patient cases needed more negotiation and more professions to be involved in the collaboration. Others only required a few professions, mainly nurses and doctors, to collaborate by forming a temporary 'knot' (Engeström,

2008b). IPC does not always necessitate all the professions being in one place at the same time, as different professions can collaborate synchronously by the use of a telephone or asynchronously mainly through documentation (See Chapter Five).

In this workplace, IPC was enacted by these simple but important acts but sometimes broke down especially when someone did not know what other professionals do in this collaboration. IPC requires professionals to be willing and make time for collaboration. Participants highlighted the importance of good communication and negotiation skills in information exchange. Findings also stressed the need to be at the right place at the right time, especially during the ward rounds, even though this was not always possible. IPC also depended on each other's expertise, being sensitive to the other professionals' needs and the need to persevere at working to achieve IPC.

Thus, the functions of the different acts of asking for information and associated responses, giving information proactively, transferring work and escalation of care, and two-way negotiation were various. Their main function was to exchange information but they also encouraged additional interaction between different professions. These interactions, if conducted with respect, resulted in shared decision-making, problem-solving and negotiating patient care, providing an optimum service to the patient. Although IPC was highly desired, it did not always go well and when something went wrong and IPC broke down, this caused friction, fragmentation of care and interruption of service. Therefore, acts of information exchange can also serve to repair broken collaborations and were also an opportunity to include other professionals in the collaboration. Acts, especially when conducted during the unplanned day-to-day encounters, were highly conducive to collaboration.

Having scrutinised the different synchronous acts and their functions conducted mainly during face-to-face encounters, special cases when interactions were asynchronous will be considered in Chapter Five.

Chapter 5 Asynchronous IPC

5.1 Introduction

Chapter Four focused on the constituent acts of information exchange encountered in IPC. These acts mainly helped in face-to-face interaction as the primary means of communication but also through telephone and cell phones conversations during information exchange. However, in conjunction with these acts, there were also other forms of communication that helped in the enactment of IPC. Participants used various asynchronous methods to exchange information. This chapter will answer the question: **What are the main features of asynchronous information exchange processes that enact IPC?**

Asynchronous collaboration was essential in supporting synchronous information exchange acts and required good communication skills (Edwards *et al*., 1997). All of the asynchronous acts were about giving and finding information but some were also about transfer of work and two-way negotiation. Therefore, this chapter will focus on examining these asynchronous acts and how they affected IPC in this setting (See Section 5.4). However, I will first illustrate the different forms of asynchronous communication. There were mainly two forms of asynchronous information exchange, depending on their mode of storage namely paper-based (Sections 5.2.1 - 5.2.6) and electronic devices (Section 5.3).

5.2 Paper-based written information

In general, asynchronous written information exchange was used when there was little or no need for an immediate response by another profession. On the other hand, when a problem needed immediate attention, the encounter was synchronous using face-to-face interaction or telephone conversations, as examined in Chapter Four. This highlights the significance of the interplay between synchronous and asynchronous IPC and illustrates how they complement each other.

During the time of the study, this hospital still predominantly depended on paper-based documents and was slowly converting to electronic documentation. Paper-based documents which were noted during observations included patients' notes (doctor's

notes), nurses' reports, referral forms, notice boards, ward-diaries and ward-round-books (See glossary). The use of these forms of communication depended on the patient's needs, the urgency of the case, custom and practice on the ward, the HCP's needs and also on the HCP's personal characteristics in respect to the choice of approach to exchanging information. Some paper-based methods of communication were also convenient for team members who were not physically located on the ward.

An important practice observed was that paper documentation that was currently in use for each patient was kept separately from the patient's older records and kept in what participants called the 'patient's profile.' This was a colour-coded file depending on the medical firm to which the patient belonged. This profile included the admission form, treatment chart, nursing report, doctors' notes, observation chart, feeding chart, a paediatric peripheral intravenous access (PIVA) form and any current results from investigations taken. This made information that was being documented currently easily accessible to individuals. A nurse stated that having different professions' documents all filed in one place encouraged asynchronous IPC:

> *Int: In the patients' notes?*
>
> *Nurse: Yes, we have to go and look through the* [records] *... and the good thing here now is that the files* [doctors' notes] *and the nursing reports now they are* [filed] *together which is a positive* [thing]. *I am seeing it as a plus* [a positive thing].
> **[Formal Interview: Nurse]**

Therefore, having all the different documents in use in one file, made it more possible for different professions to access each other's notes and made it easy for them to seek out desired information from the original source. Moreover, the patient profiles were kept at the NS, an area where all the professions met and collaborated. However, this was not always happening as will be illustrated in Section 5.2.2. As the following sections will illustrate, some documentation was unnecessarily duplicated, widening the possibility for errors to occur especially where treatment was concerned (Pronovost *et al*., 2004).

5.2.1 Patients' notes

Patients' notes, written mainly by doctors, are signed legal documents, recording a brief factual summary of what the different professions contributed towards the care of the

patient and would like others to know. For legal and clinical reasons, these are stored for many years. In addition to summary findings from examinations, notes may also include new treatment, changes in care plans and instructions for other professions to follow up. As was illustrated in Section 4.4, if immediate action is required, the writing up would be immediately followed or preceded by either face-to-face interaction with the professional involved or perhaps he/she would be contacted by telephone. Doctors were the main contributors to patients' notes. Their input in the patients' notes takes place during the ward round or after a review (See Section 7.2). They document findings from the patient's examination and perhaps any new decisions taken regarding the care plan. This is especially important when it is necessary to consult with other professions and functions as the centre point of care delivery. Other professions referred to these notes continuously and also added information.

Most professions, such as social workers, physiotherapists and psychologists, usually added to these notes while nurses had their own report forms. However in the ongoing action of providing care on the ward, the summary record in patients' notes had some deficiencies that were overcome by other forms of communication. The risk of urgent matters not being read for some time was overcome by the verbal briefing that doctors handed over, either to the nurses-in-charge or to the named nurse of the patient in question. If a nurse accompanied the ward round, s/he would brief the other nurses mainly using the ward-round-book (Section 5.2.4) Nevertheless, the brief factual record was sufficient for non-urgent IPC when the person writing it knew that the record would be read at the next ward round, handover or when the nurses wrote their report. The limitations of the brief factual record in terms of lack of nuance and contextual information were overcome by the more elaborate verbal briefing exchanged after the ward round (Section 7.2.6) and the nurses' report which will be discussed in Section 5.2.2. Nurses consulted patients' notes more often when no nurse accompanied the ward round or the named nurse was not next to the patient during the ward round. This highlights the interplay between asynchronous and synchronous collaboration.

Patients' notes were also consulted if a professional coming from another department needed to know previous changes or to follow up doctors' instructions. They would also gather information from the referral note they had received. This will be examined in Section 5.2.3. Patients' notes were also brief and factual and were also consulted by

other professions, like nurses or doctors, and followed by face-to-face interaction when the need arose (discussed in Chapter Four). Therefore, information exchange is a complex act that may involve various ways of communication during one episode. The following excerpt clearly illustrates this:

> *The two physiotherapists walk in and take the referral card left for them on the desk. They greet everyone and consult with the doctor about the new referral. They also look at the patient's notes and go to review and treat the patient. When they come back to the NS, they make an entry in the child's notes and keep the referral card to file in the physiotherapy department for future reference.* **[Field notes: Observation 21]**

In this event, IPC between the doctors and the physiotherapists starts as asynchronous by using the referral card and notes, it then continues synchronously during face-to-face consultations and ends asynchronously again. This was the main pattern of IPC between these two professions. This was sufficient for non-urgent cases, however, in urgent cases, someone would phone the physiotherapists (or another profession) that there was a new patient being referred to them. In these cases, face-to-face interaction, where more nuanced information exchange occurred, was the preferred method, as illustrated in this interview:

> *The white one* [card], *the referral card is filled out. Now, either the nurse-in-charge of the ward or the ward secretary explains that. We have a pager system and that we take the* pager [with us]*, we call and we will know when there is a new referral. Then we go and follow* [it] *up from there. If we need to see the information on the file, we ask the nurse, we meet with the consultant himself so that we can talk to him, or else to one of his seniors, or junior doctors? And we generally communicate verbally, through direct contact because we meet on the ward and we just face them* [approach them]. **[Formal Interview: HCP]**

Patients' notes were also consulted when verbal communication was not clear or failed its purpose, as this excerpt from an interview with a nurse confirmed:

> *Int: Yes, I noted that, for example, it has happened that he* [the doctor/consultant] *hands over to one nurse and then that nurse goes on break.*
>
> *Nurse: That's it, and …*
>
> *Int: Then …*

Nurse: It sometimes happens that the handover is not done properly. (...) It often happens that I [need to] *read the files* [patients' notes] .... .**[Formal Interview: Nurse]**

This same nurse emphasized that verbal handover needs to be supported and verified by written documentation:

... Or they are giving treatment. They start the treatment and something similar. I like to tell them straight away and give them the handover or otherwise when they come back from the break. I find them and I tell them, "Whose [patient] *is he? This, this and this* [is needed]*." And I tell them. Even myself, there have been times when I possibly forgot to tell them something. In other words, it has happened. They* [the nurses] *also check the file* [patients' notes] *too.* **[Formal Interview: Nurse]**

A doctor also emphasised the importance of following up what they write in the notes with a verbal handover and pointed out that doctors' handwriting may hinder nurses in following what is written:

Doc: It depends on the handwriting, I guess! [laughter] *Normally, we try to make things as clear as possible on the notes but then, sort of, obviously, I mean, just to make sure that the nurse has got the message, especially if they are not going around with us is to give her a verbal account of what happened and sort of to have her then ...*

Int: As well.

Doc: ... refer to the notes and that is what they normally do, anyway.
[Formal Interview: Doctor]

The doctor's quotation implies that although they expect the nurse to look up notes in the patient's file, doctors do not only rely on this, but also expressed the need to follow this up with verbal communication. When this is not done, unwanted situations can occur. Poor communication skills are the most common causes of adverse situations in healthcare (Leonard *et al.,* 2004). Doctor's notes are factual short summaries of what is discussed during a patient review. If the nurse is not present, the follow up conversation not only removes the concern that the nurse may not realise there are new notes to read, but allows a more nuanced conversation, including the expression of uncertainty. It also allows for clarification of understanding, negotiation and shared decision-making. These two modes of information exchange work in tandem as also evidenced in Section 4.5.

5.2.2 Nurses' report

As will be examined in Section 8.5, nurses mainly used their reports (which are also legal signed documents stored for many years) during formal handovers to update themselves about the patients at specific times in the 24-hour cycle of shift-based care. However, professionals, mainly nurses, also consulted these reports at other times to update themselves on the continuous care being given and to pass on any information to other professionals. Thus nurses' reports had similar functions to the parallel patients' notes. Occasionally, the doctors would read the nurses' report to confirm that previous decisions were followed up. Apart from including nursing interventions, the nurses' report also included information written by the doctor in the patient's notes and also what was written down in the ward-round-book (Section 5.2.4). It also included documentation of any visits and interventions by other professions, making it a most comprehensive documentation of the patient's history because it would comprise all other professions' input. However, this creates time-consuming duplication and the possibility of transcription errors.

Due to their comprehensiveness, nurses' reports have the potential to help in the day-to-day conveying of information and thus IPC, and to record the progress or otherwise of the patient from one day to the next. In my observations I noted that although nurses considered these reports as very important, other professions consulted these reports only occasionally, usually preferring the more succinct and medically-led but multidisciplinary patient's notes. Thus, HCPs in this setting may not be giving the attention due to a document that amplified patients' notes. The nurses' report sheet has different sections to it, comprising information that only requires ticking, other parts require brief notes and then there is a section where more elaborate notes may be written down. This last section of the report is what is read out during the nursing formal handovers (Section 6.3.2).

The nurses' report is written in a different manner than the doctor's notes. Although it includes factual information and offers a formal record for legal and clinical reasons, it is more nuanced than the patient's notes and comprises a detailed breakdown of the patient's day and night progress. It records any visits from other specialists, who might not have recorded anything in the patient's notes. When the nurses' report is being

written, nurses consult the doctor's notes but they also write information about their contact with the patient and their families, creating a more holistic report.

This report can play a very important part in the on-going action of providing patient care since it comprises information for all HCPs, including doctors. However, my observations showed that other professions made limited use of the nurses' reports.

5.2.3 Referral forms

Referral forms are mostly written during ward rounds, always by the doctors, and when the expertise of another professional, such as physiotherapist, nutritionist, psychologist, social worker, or another paediatric specialist, is required. Unless the request is urgent, the ward clerk or a carer hand delivers the form to the appropriate professional in another ward or department. Sometimes, other professions are contacted by phone and notified that they have a referral, especially if the case was urgent. When the request is not urgent, this asynchronous IPC allows other professions to review and work with the patient autonomously and in their own time, implying that IPC does not always require all the professions to be present in one place at the same time. This flexibility gives more autonomy and independence, especially to those professions not located near or on the ward. By autonomously planning their visits, the therapists are able to cover many areas of the hospital efficiently. Of course, in cases of emergency, they interrupt their work wherever they are and come immediately.

5.2.4 The ward-round-book

The ward-round-book is a hardbound file where any decisions about the patients are written down by the nurse-in-charge, especially during the ward round but also during the day. It is an informal document and carries no signatures, unlike the patients' notes and nurses' report, where each entry requires a signature. The ward-round-book is not necessary – all the information can be found elsewhere in the documents mentioned in Sections 5.2.1 to 5.2.3, so it is my opinion that it is inefficient and risky to have the ward-round-book. Yet, having such a book is an old practice that team members on the wards seemed to be reluctant to part with. I am sure that it helps people to understand the day-to-day progress on the wards and this information supports them in their work. However, it is definitely risky to have two records in place since a change might be recorded in one place (either the official record or the ward-round-book) and not in the

other. While during my observations I did note that this system did cause some problems, I do not believe that these were sufficiently serious to change the current system and replace this 'artefact.' During a formal interview a nurse confirmed this possibility:

> *Write in a ward-round-book? (...) it happened to me two times and now I am not going to let it to happen the third time* [cough]. *Especially when it is not the nurse-in-charge, the real nurse-in-charge, like* [uses first name]. *Because sometimes another nurse goes with the ward round, she doesn't look in the file after they* [the doctors] *give her handover and sometimes the doctor[s] don't give sufficient handover, they give partial handover. They tell you "this we will continue" da da da and then they will have written in the file like one thousand more things.*
> **[Formal Interview: Nurse]**

And she continued:

> *Nurse: Yes and you, your responsibility is not this piece of paper which is written by an unauthorised person. It's what the doctor has written* [in the patients' notes*] so we have to go ...*
>
> *Int: In the patients' notes?*
>
> *Nurse: Yes, we have to go and look through the ...* [doctors' notes].
> **[Formal Interview: Nurse]**

Yet, all the teams had a ward-round-book and this was a deeply-embedded part of the ward culture in all four wards (although I anticipated the imminent introduction of electronic records). I was not given permission to photocopy a page as a sample from this file for demonstration purposes so I sketched what a two page entry would look like, omitting all confidential information (See appendix 19). Bed numbers are written down chronologically and patients' names included next to each number as well as the name of the consultant taking care of the child. The last column is where any changes are written in red ink, so as to be more easily noticed by the reader.

Although this is an informal document, participants, mainly nurses but also doctors, consulted it frequently as this is kept updated at all times. During observations, I noted that HCPs regularly check this book for information about bed state, newly admitted patients, any discharges, as well as about any investigations which might have been

ordered, especially after the ward round. It is my opinion that the ward-round-book offers a short-term solution until the participants have had chance to verify this information with doctors' notes. They then rewrite this information in the nursing report. The following excerpts confirm this:

> *The ward-round-book plays a very important part as all the changes are written here by the nurses while the doctors write changes in the patients' records. These changes are later written down in the nursing report also* **[Field notes: Observation 1].**

> *A doctor comes in and says hello. She asks the ward clerk how she is and checks the ward-round-book to see if her firm has any patients to be reviewed* **[Field notes: Observation 17].**

The ward-round-book was also referred to when the nurse-in-charge attending the ward round needed to brief the other nurses about what changes were done and any instructions were handed over.

> *When ward rounds are over, the nurse-in-charge and the senior nurses congregate around the ward-round-book and they are briefed about all the changes done and instructions still pending from the ward rounds. This information is written down in red in the ward-round-book.* **[Field notes: Observation 11]**

Although it is an informal document, the consultant and other professions have also accepted the use of the ward-round-book, as is shown in this next excerpt:

> *Two nurses come near the patient and one of them has the ward-round-book in hand. The consultant repeats what the new plan for the patient is so that the nurse can write this down in the ward-round-book.* **[Field notes: Observation 33]**

The ward-round-book offers information that is easily accessible and if the right and correct information is written in it, it can act as a quick referral source. Cabitza, Simone and Sarini (2009) stress the importance of easily accessible knowledge that can instruct users to further action. In this way, the ward-round-book has the potential to facilitate IPC. It is mainly the nurses who write in the ward-round-book which may be an advantage. It is written by nurses mainly for nurses, in a language that they understand. However, if incomplete or incorrect information were included, this would hinder IPC and lead to an incomplete care plan and patient errors. The informality of the ward-round-book also makes it susceptible to more errors.

Perhaps the ward-round-book is used, despite its redundancy and risks because at some level, there is a desire for multidisciplinary notes. If the wards moved to multidisciplinary notes, this would be a combination of the patients' notes and nurses' reports (further discussed in Sections 5.2.1 and 5.2.2), which is the role currently fulfilled by the ward-round-book.

HCPs, especially nurses, need to find alternative formal and reliable sources from where they can find the information that is given in the ward-round-book. An update of the ward's bed state, any new admissions or patients discharged home, can easily be obtained electronically from the Clinical Patient Administration System (CPAS). Ward round instructions and decisions taken can be confirmed in the doctors' notes and the nurses' reports. In my opinion, making the ward-round-book redundant will require a radical change in practice as this system has been around for a while and HCPs rely on it. The change will ultimately come when the wards shift to a paperless setting and HCPs learn to rely more on information available electronically.

5.2.5 The-ward-diary

Each ward in this setting have different uses for the ward-diary, which is usually kept at the NS and used by all professionals. However, in every ward it is primarily used by the nurses-in-charge to document patient allocation to the different nurses for the day,

> *The nurse-in-charge has written down who is looking after whom in the ward diary. As soon as handover is done, the nurses, three in all, all look at this diary to see who their patients are. They also consult the patients' profiles to see what treatment is due and they go to the treatment room to start preparing to administer it* **[Field notes: Observation 21].**

This excerpt is an example of when two sources of asynchronous communication are combined to progress asynchronous IP teamwork. The diary is also consulted during the day by various HCPs who prefer to give a handover directly to the named nurse and they need to know which nurse has been allocated to a particular patient.

Other uses for the ward-diary include adding information that any HCPs need to exchange on a specific day such as, elective admissions and children attending for special treatment during the day as illustrated by the excerpt below:

Nurse: "I need to book a patient to be admitted in two weeks' time."

The nurse takes the ward diary from the desk and writes down this information. This is a ward diary where the daily patient allocation is written down for the nurses but also used for any day cases or such information **[Field notes: Observation 1].**

This kind of asynchronous information enhances IPC and the day-to-day management of the ward by planning ahead which patients are expected to be on the ward on a specific day. The ward diary contains brief and to-the-point information that is easily accessed by HCPs. It serves as a way of communicating with each other and HCPs refer to it when needed.

In one ward, the ward diary is also known as the attendees' diary because in it, the team includes the names of all the children who are visiting the ward for treatment or for day surgery in the following days. This has an impact on the ward bed state and the management of the ward. One ward receives several day patients besides their inpatients and another has pre-planned admissions for elective surgery.

Therefore, the ward diary has multiple uses and enhances IPC by providing information about who is looking after specific patients, but it also includes pertinent information regarding planned admissions or patients visiting in the following days. This served to progress day-to-day work on the ward, having HCPs consulting the diary and not interrupting their colleagues. The ward diary also fills in some gaps in communication that were lacking in other forms of communication. The other documents referred to, namely patients' notes, nurses' report and referral forms, all track the progress of individual patients' care. In contrast, the ward diary is exactly as its name implies – a temporal record of the presence of patients and the allocation of named nurses which helps the team predict and manage the ward-wide work.

5.2.6 Notice boards

Notice boards are another means of conveying information asynchronously, as part of IPC. There are usually two notice boards in each ward; near the NS. One of them is mainly used to communicate general information, such as the doctors' and consultants' weekly roster, so that other professionals, especially nurses, would know who is on call on a particular day. Participants also use this notice board to announce any social

events, such as barbeques, where all staff on the ward would be invited. At the very top in the middle, a place which I presume is the most prominent, written in bold large letters are instructions for calling out the cardio-pulmonary resuscitation (CPR) team. This notice board was also where I displayed my poster at the beginning of my study, informing participants about the study. Accessing the readily-available information on the notice boards helps different professions to solve problems asynchronously, thus improving IPC.

During my observation sessions, I noted that the second notice board was covered with thank-you cards, which patients sent to the ward staff in appreciation of their care. In one ward there were also pictures of former patients who had survived a critical illness. Sadly, there were also pictures of some who had not survived. This board was a point for conversation when the area was not busy, as participants could update each other with news of previous patients. These conversations were often interprofessional. The thank you cards were also testimonials of satisfied patients and parents. Although this notice board does not have a direct influence on IPC, it helps participants to stay close to their patients and to generate discussions that enhance interaction which is both intra and interprofessional.

The advantage of using notice boards is that participants can refer to the notices when needed or convenient for them and information is always available in a prominent place near the NS. This is an area where staff spend a lot of time and is often an area for having a conversation, even of a social nature. Social interactions during less busy working hours and those outside the working environment (not addressed in this study) are both important and can enhance collaboration at work. These can be opportunities for professionals to get to know each other professionally and personally (Moore, Prentice, & McQuestion, 2015).

5.3 Technological devices

At the time of my observations, most of the medical records and written information exchanged in this setting were still being recorded on paper. However, information technology (IT) was being introduced gradually and therefore, some of the information exchange was done electronically.

The main areas where IT was used were in:

- Clinical Patient Administration System (CPAS) for patient details, such as ward where admitted, admission details, appointments and clinical diagnosis;
- iSoft (See glossary) laboratory information system for pathology results;
- Picture Archiving and Communication System (PACS) for radiological results.

These IT services allow different professionals to collaborate asynchronously within the ward itself and also with other departments such as the medical imaging department and the various laboratories, as shown in this excerpt:

> *When an admission comes in I look carefully at all the details. Even in the CPAS so that if he comes in again, we would have all the details ready* **[Formal Interview: HCP].**

> *One of the doctors goes to another ward and two others stay on this ward. They both sit at the desk at the NS and start downloading laboratory results from the iSOFT and radiology images from the PACS to be ready for the ward round. These are the two doctors who will be reviewing all the patients before their consultant comes to do the ward round* **[Field notes: Observation 21].**

Despite having their own office and computer, doctors often prefer using the same computer as the nurses and ward clerk at the NS for asynchronous IPC (reading and writing) with colleagues not based on the wards. This has implications for synchronous IPC. By using the same workspace, it was easier for the doctors to interact with colleagues whilst obtaining electronic information; thus supporting IPC. (It also involves less physical effort as the doctors' office is usually situated at the end of a long corridor). The NS is the space where participants interact continuously and where doctors discuss results with other doctors and sometimes with nurses or other professionals. However, using these computers at the NS may also cause problems since nurses then do not have access to computers.

A drawback of using IT during ward rounds is that someone has to leave the ward round and go to the NS to check on results or perhaps a radiological image as no portable data access was yet available at the time of my observations. This tended to disrupt the face-to-face interaction initiated in the ward round and could have led to IPC breakdown.

During the interviews, only a few professionals, namely a physiotherapist, a social worker and some of the doctors mentioned the use of electronic mail as a means of collaborating with other professions. This was not mentioned as a common means of communication for other professions:

> *HCP: Look, personally I, ... because we all have quite different characters, the three of us ...* [uses first name] *is still new, so in other words, we cannot really say. But* [uses first name]*, for example, likes using e-mails ...* **[Formal Interview: HCP]**
>
> *Int: And do you use e-mails?*
>
> *HCP: Let's see, there are* [were] *e-mails with the doctors, yes, when there were quite complicated cases, I somehow started to liaise with the doctors by email* **[Formal interview: HCP]**

I also observed that cell phones were sometimes used instead of landline telephones as part of synchronous interactions.

5.4 Asynchronous actions supporting constituent acts of IPC

In Chapter Four, I identified the acts comprising information exchange during IPC. These were asking for information and associated responses, giving information proactively, transferring of work and escalation of care, and two-way negotiation. Asynchronous collaboration, which was considered in Chapter Five, also supported these acts; mainly the giving of information and transferring of work acts. I will now discuss further how these acts functioned in information exchange.

Giving information and transferring of work were spread throughout four of the main paper documents, namely the patient's notes, nurse's report, referral forms and ward-round-book. It is mainly doctors who write in the patients' notes, although other professionals, such as the physiotherapists and social workers are also able to input information. The information comprises documenting the on-going and changing care plan after reviewing the patients. This informs other professionals of the decisions taken, especially if other professionals were not present during the review. Doctors also include what further actions other professions, mainly nurses, need to do, such as performing specific clinical procedures, taking the patient for a medical image or other consultations. However, these notes are often insufficient as HCPs are not able to be

sure how long it would be before others read them. HCPs therefore engage in synchronous collaboration through verbal, face-to-face interaction, especially if urgent action needs to be taken.

The nurses' report is more extensive and comprehensive than the patients' notes. Nurses not only give information of what actions still need to be taken by themselves and other professions, but also report on the action when this was done. Therefore, if doctors perform a clinical procedure, it is documented in the doctors' notes but the nurses would also document that this procedure has been carried out by Doctor (name included) and would also give the results after evaluating the patient. This gives a more holistic picture of the state of the patient after the treatment he/she has received. As will be further discussed in Sections 6.3.2 and 8.5, professionals may be under-utilising this document which offers more salient details than the brief doctors' notes.

Referral forms notify other professions that their expertise is needed for a specific patient. Through these forms, professionals on the wards reach out to other professionals who are located in different areas of the hospital, extending the collaboration to beyond the confines of the ward. Professionals, such as physiotherapists rely on these forms for work to be transferred to them. They know that they can rely on the doctors to inform them through this system of leaving these referral forms at the NS.

The ward-round-book mainly conveys information about the changes that are made during the ward round. It is referred to during handing over when staff leave for coffee breaks or when they come back. It is also used by the nurse-in-charge to brief nurses after the ward round. Therefore, if nurses rely solely on the information found in the ward-round-book and ignore other information which is written in the doctor's notes only, a breakdown of asynchronous collaboration could occur and patients would miss out on treatment or care.

Nurses are generally the ones using the ward-round-book. Other professionals do resort to finding information from it. It is an easily-accessible book and when not in use, is left on the desk at the NS available to all professionals. It is my opinion that this book is no longer used as it can sometimes pose a communication and safety risk. Nurses should

preferably rely on doctors' notes which are more reliable and the verbal handover that may follow or precede documentation. Looking from the outside, this book is part of an archaic system even though it is highly valued by the staff. Therefore, alternative sources of information need to be found, as discussed in Section 5.2.4.

Technological devices addressed all the constituent acts of information exchange. These devices were referred to for information for example regarding the personal details of a patient from the 'CPAS.' Doctors also requested laboratory tests or perhaps a medical image by using the 'iSoft' and 'PACS'. In response, other professionals such as the radiographers and laboratory technicians conveyed back information through these systems. At the same time, when doctors were requesting these tests, they were also transferring work to other professionals. On the other hand, electronic e-mails were the closest form of communication I could identify that created a two-way negotiation act. During the formal interviews, only three professionals referred to this mode of communication spontaneously, however, this does not mean that it was not used. I did not specifically probe about this during every interview. During informal conversations, one nurse-in-charge also mentioned that electronic e-mails were a most convenient asynchronous mode of communication, immediately contacting other professionals especially from other departments, and allowing the receiver to follow the conversation at their convenience.

5.5 Conclusion

This chapter examined asynchronous acts that may further enact IPC in this paediatric setting. Various ways of communication and information exchange were highlighted and characterised by two main modes of information storage namely paper-based written form and electronic devices. Various modes of asynchronous information exchange helped in the four constituent acts as discussed in Chapter Four. During my observations, paper-based methods were mostly used to give and find information and also to transfer work, while electronic devices were also used for these acts but also for asking for information and two-way negotiation. Although these asynchronous acts sometimes acted independently to exchange information, they also supported synchronous information exchange at other times. An important finding was that professionals showed that some asynchronous acts, such as the notes written during the

ward round, were mostly followed up by synchronous, face-to-face interaction, between professionals. After having done their ward rounds, the doctors would support their written notes with a verbal hand over and may also add more explanatory information to the nurses.

The nurses' report was also found to be written in a most comprehensive way, informing others of the details of the patients' care plan, change in treatment, and details of which professionals visited each patient and what action was taken. However, it was mainly nurses who consulted this document and therefore, being underused, professionals were missing an opportunity for encouraging IPC.

Some of the benefits of asynchronous IPC included that professionals could access and exchange information at their own convenience, from other parts of the hospital. This worked well when the case was not urgent, relying on other modes of synchronous acts if the case was urgent. Therefore, the deficiencies of one form of communication were overcome by another form of communication.

These descriptions in Chapters Four and Five of how information is exchanged, arising from careful observation, have illustrated how both synchronous and asynchronous IPC are necessary and how they can support and complement each other. The next stage will include an analysis of these acts during the different encounters of IPC, taken through the lens of scripts. A deeper analysis of how different encounters invoke different categories of scripts will take place in Chapter Eight. But first, in the coming Chapters Six and Seven, the lens of scripts will be explored. By drawing from examples from the data corpus, the different categories of scriptedness and how scripts influence and guide behaviour and actions in different encounters will be illustrated.

Chapter 6 The categories of scriptedness

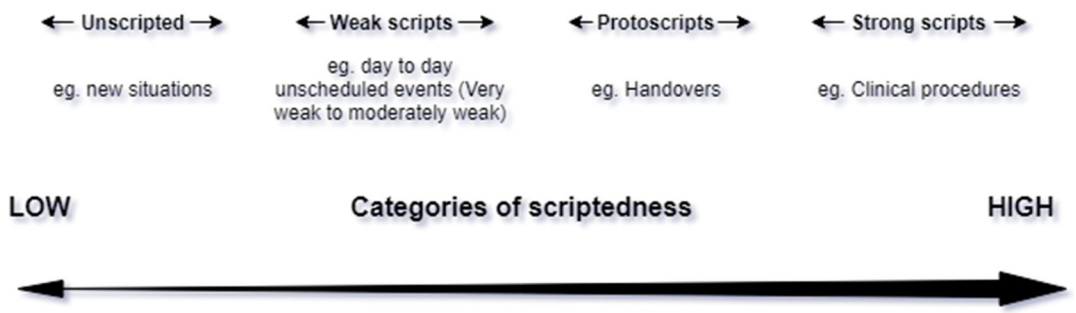
6.1 Introduction

The reason why I chose Goffman's (1959) (See Section 3.4) concept of scripts to analyse the data corpus is that script theory helps researchers understand the behaviour of individuals more effectively (Vanclay & Enticott, 2011). Vanclay and Enticott further claim that scripts help to progress the day-to-day work in organisations since scripts are convenient and encourage expected responses, especially in negotiating common events. Therefore, in my view, the concept of scripts is relevant to healthcare encounters and the enactment of IPC.

With relevance to this particular workplace, what I really consider as mostly representing scripts that influence enactments of IPC, is a narrower band of the spectrum as described by Gioia and Poole (1984), illustrated in
Figure 3.1. The scripts observed in this study rarely included unscripted episodes, but were often scripted weakly, the protoscripted (stereotypical situations, see Section 6.3), to the strongly scripted (See Figure 6.1). However, there were also encounters which were more complex, such as ward rounds and MDT meetings, which utilised a spectrum of scripts in a discernible pattern, creating a multi-level metascript. Strong and weak are difficult terms, although they are the correct technical terms from the literature. Normally, strong reflects something good or better; however, one of the messages in the findings of this study is that a weak script may be better for IPC, so it feels a bit contradictory.

In this Chapter, four key categories of scripts will be explored in the sequence (from right to left) as shown in Figure 6.1 namely; strong scripts, protoscripts, weak scripts and unscripted encounters (Sections 6.2 to 6.5). The spectrum is continuous with each category gradually merging into the next. Thus, for example, scripts may be moderately weak or very weak. The multi-level scripted encounters will be presented in Chapter Seven and a more analytical account of how scripts function and influence encounters will be presented in Chapter Eight.

Figure 6.1 The different categories of scriptedness



6.2 Strong scripts

At one end of the spectrum, there are strongly scripted encounters that follow a rigid script where individuals are not only expected to behave according to the script, but the script also directs the sequence of actions that follows (Abelson, 1981). Strongly scripted encounters in this study included safety checklists, such as the preoperative list that was filled in and signed by the nurse before the patient was taken to theatre. Although these lists were available in sections of the setting studied, such observations were not followed up as these encounters only involved the nursing profession while on the ward and remained intraprofessional involving the anaesthetic nurse once the patient was transferred to theatre. Another example of when interprofessional collaboration (IPC) was highly scripted was during clinical procedures, such as insertion of a urinary catheter, insertion of an intravenous cannula and when performing a lumbar puncture (See glossary), carried out in the examination/treatment room. These could be either backstage or frontstage encounters, depending on whether there was an audience, usually the parents.

During these encounters, a strong script was invoked that not only guided professionals in what actions to take, but also outlined the sequence of the actions. The professionals knew what to do as these procedures were frequently and routinely performed. Thus, verbal interaction was not always necessary. For those familiar with certain clinical procedures, such as performing a lumbar puncture, it is well known how important it is that professions work as a team, with each one knowing their role and when to execute it. The following is an example of this:

For the lumbar puncture, they ask the mother to wait outside, as this may be too distressing for her. The patient is a two-month-old baby. This is a time when nurses and doctors work 'hand in hand' and depend on each other. The doctor performing the procedure depends on the skills of the person who is holding the baby and another who assists and knows all the steps and how they should be followed. A nurse is trying to soothe the baby by gently talking to him. Whilst observing, I also take on a nursing role and try to help by opening sterile packs for them to use. When the nurses tease the doctor about how good he is at this procedure, he turns to me and tells me to make sure I write this down. This reminds me that no matter how much I try to mingle and fit in with the group, they are still aware that I am there to observe. As soon as the procedure is finished, I again take on a nursing role and ask the mother to come in. **[Field notes: Observation 16]**

The very strong script gave structure to the encounter and helped the professionals to perform the clinical procedure efficiently – to the extent that they had sufficient spare mental processing capacity to joke among themselves and with me. This procedure requires complete trust from each professional and depends on him/her carrying out the expected role at the right time. Therefore, a strong script is appropriate in guiding this type of encounter. Not knowing what comes next in this script may result in an unsuccessful and harmful procedure. The writing up of the patient's notes that followed this procedure was also highly scripted, with the doctor's writing being precise and concise and always in the same format. Of course, if the procedure had not gone as normally expected, the team would have begun to collaborate in a different way to solve emergent problems, and the level of scriptedness would have changed.

6.3 Protoscripts

A protoscript is developed when daily repetitive or stereotypical situations occur which are less rigid than situations which develop strong scripts. Protoscripts guide the flow and sequence of these encounters but allow for more interaction and disruption. The well-rehearsed formal handovers observed in this setting provide good examples of protoscripts where events followed a daily pattern. Although these encounters had an unwritten agenda invoked from previous similar encounters, sometimes the script also allowed controlled script processing (See Section 3.4.2), which influenced the content of the encounters.

Formal handovers in this context were those handovers that had a specific time and place when and where they were held. They were backstage encounters, were reserved

for professionals only, where confidential patient information was discussed. There were mainly three times of the day when these were held. One was the handover given at seven thirty in the morning by the night duty doctors to the day duty doctors and this will be examined first in Section 6.3.1. The other two were the handovers given by nurses to their counterparts and nursing assistants at seven in the morning between the night and day shift staff, and again vice versa at seven in the evening. These will be examined in Section 6.3.2. These three handovers were mainly 'intraprofessional' encounters. However, in line with the main aim of this research study, that is to explore how IPC is enacted in this setting, I drew upon the observations during these handovers, to see how they affected IPC. These handovers were closely related to what participants did immediately afterwards and this is when part of the handover became interprofessional, occasionally also including the patient and family. There were other forms of handovers happening throughout the day and night but these were mainly informal and unscheduled encounters and will be discussed in Section 6.4.

6.3.1 Doctors' handover

During my observation of this handover, the doctors updated each other on the patients' clinical conditions. They discussed information on any new admissions and informed each other of what else needed to be done for the day. The following is how I described this meeting in my field notes:

> *This handover is given in the doctors' office (...). The room is rather small. There are only three seats available so the rest of us stand up in a circle. The doctors who were on night duty, three* [two seniors and one junior] *hand over to the doctors who are on day duty* [nine in all]. *Some come in late. The consultants do not attend these handovers. The handover, although a formal meeting, is done in a relaxed way and they all comment on what is said at some point or other. It takes a few minutes for everyone to settle down and listen attentively. Each doctor is given a sheet of paper with the list of patients who are on the two medical wards so that they can follow each patient. This sheet contains the details of the patients and information regarding what has been done and what is still pending.* **[Field notes: Observation 22]**

Although this was an interactive time, individuals still followed a protoscript. They also used a printed sheet that had the following information in it namely; patient's name and bed number, date of admission, patient's other details which included ID number and age, working diagnosis, any pending investigations or results, treatment being given and

observations to be carried out. Each doctor had a copy of this form. Thus, the written documentation used for this handover was in itself highly scripted almost in the form of a checklist, but it generated discussion conversation among those present.

The doctors went through the entire list of patients, highlighting those patients who were admitted during the night or those who were already in-patients but who had required a review during the night because of their critical condition. Similar to strong scripts, having a protoscript that guides the flow of the meeting made sure that all patients were discussed. No major decisions were taken during this time and its main purpose was the transfer of information and to permit questions for clarification or the soliciting of opinions and recommendations.

The information shared during these encounters was mostly medical, addressing issues such as diagnosis, treatment given or treatment being given and investigations done or still pending. However, the handover was then followed up by some of the doctors visiting each patient's bedside, reviewing the patient and liaising with other professionals (mainly nurses) and also the family. This was in preparation for when the consultant came for the ward round (to be discussed in Chapter Seven). This was also a weaker protoscripted and less formal phase of the handover which provided an opportunity for doctors to interact with bedside nurses and those near the NS; thus, doctors continued to inform themselves about patients. It also provided a chance to interact with other professionals, such as the teachers, play teachers, and physiotherapists who were on the ward at that time. This was also an occasion when nurses voiced any concerns about the children they were looking after. Nurses knew they could rely on the doctors going round to discuss any worries they had about the patients' condition. Although it was frontstage near the patients and families, nurses waited for this encounter to interact, rather than proactively seeking out interactions with the doctors. Perhaps the less formal aspect of the encounter helped to encourage IPC between these two professions. In contrast, during more strongly scripted encounters, such as some phases of the ward round (Sections 7.2.3 and 7.2.5), nurses and other professionals, particularly junior staff, rarely spoke without invitation.

6.3.2 Nurses' handovers

The nurses' formal handovers were another form of protoscripted encounter. This section focuses on two main official times when formal handover between nurses occurred. The first is the handover in the morning from night shift to day shift and the second is the evening handover from day shift to night shift. These occurred near the NS, an area that was rendered backstage by the perceived barrier (Goffman, 1959) of the desk that separated the area from the public corridor. Ward clerks, nursing assistants and nursing students also participated in these handovers.

During the morning handover, the most senior staff, usually the nurse-in-charge for the day, would transfer information about patients to the other day staff. The night staff would have already handed over to the day nurse-in-charge. The following excerpts from field notes describes how the protoscripted morning and evening handovers were conducted:

> *7am*
> *The nurse-in-charge starts reading from the nursing report to give handover to the other day nurses. She sits with her back to the other nurses and sits at the desk with the report in front of her. Her voice is loud and clear and I assume may be heard by the nurses. Some nurses take notes on a piece of paper. I stand opposite her with the high desk separating us. Mothers who ask her questions about their children sometimes interrupt her. The phone also rings and interrupts this handover, as a nurse needs to answer it. A nursing assistant joins the group, coffee mug in hand … Although this is an important and formal aspect of the work for the day it is also a relaxed form of meeting. In the meantime, the ward gets busy with trolleys of food supplies being delivered; another food trolley is being wheeled out …. One of the nursing assistants starts to give out breakfast while the other prepares the menus for the following* day **[Field notes: Observation 01].**

> *7pm*
> *The night staff now start to arrive one by one. The first one to arrive receives handover from the day nurses, where each one hands over on the patient she or he was looking after for that day. They assemble near the NS to take this handover. This area is quiet at this time of the evening. When all the night staff arrive, the nurse who received the handover now hands over to the rest of the night staff. When they receive handover, the nurses all disperse to do the tasks allocated to them.*
> **[Field notes: Observation 13]**

During my observations I noted that the nurses' report (See Section 5.2.2), which is a strongly scripted document always follows the same format and that the handover serves to update nurses, some of whom may be returning from a few days' leave. Part of

the nurses' report is in the format of a checklist but there is also space to write other pertinent information. During handover, nurses also inform themselves about the patients' present condition and the clinical plan. They take notes if patients need special investigations urgently or perhaps need to be prepared for surgery. Therefore, through this handover, they were planning the work for the shift and prioritising what needed immediate attention. This information also prepares the nurses for when they went to the patients' bedsides and they continued to update themselves further by obtaining more information from the patients and families. Similar to the phase following the formal doctor's handover (Section 6.3.1), this phase encouraged more IPC. The information obtained in the handover was then shared as necessary with other professionals such as doctors, physiotherapists and play teachers who visited the child, thus enhancing IPC.

6.4 Weak scripts

Weakly scripted encounters were mainly observed during unscheduled interactions on the ward which occurred frequently, helped enhance the day-to-day work and were when IPC was most commonly present (apart from MDT meetings, see Section 7.3). These encounters were considered weakly scripted because, during such encounters, despite participants having a general idea of the format of what was going to happen, events differed in detail and length from one encounter to the next. This depended on the complexity or urgency of the matter, the amount of reflection needed, who was involved and their capacity or willingness to engage in collaboration at that time. When invoking weak scripts, participants shifted between "automated script processing" and "controlled script processing" (Gioia & Poole, 1984, p. 449). Automated script processing occurred when the conversation only required simple automatic responses. This is more in line with care coordination (See Section 1.2). But what I mostly observed and focused on in these weakly scripted encounters were the ones where there was more controlled script processing, that is, the conversation required more reflection on the nature of information being exchanged.

The low level of scriptedness during these weakly scripted encounters, allowed a deeper level of collaboration to emerge. What was also common and important in these weakly scripted encounters was that they occurred in an informal setting and mostly backstage,

although they also had the potential of being frontstage when they had an 'audience.' These encounters mostly occurred in corridors, but also near the NS, and in the treatment/examination rooms. These short encounters during the day-to-day work were also reminiscent of Engeström's (2008b, p. 19) "knotworking." It is worth noting that none of the interview participants referred to these short day-to-day encounters as occasions when IPC occurs. They focused on more formal ward rounds and MDT meetings, as examples of IPC. Therefore, I concluded that they may not appreciate the level of collaboration accomplished in more frequent shorter weakly scripted meetings.

By following a weak script, mainly in an informal setting, these common encounters could be more permissive, allowing different professionals to be proactive in initiating interaction. In encounters where a discussion ensued, professionals were more ready to listen to each other and take collective decisions, irrespective of what professional status they held. This resulted in greater IPC and therefore problems were solved or a service was provided to the patients. The following excerpt is an example of this category:

> *While standing at the NS, the following conversation occurs. The doctor and nurse are discussing a patient who is in respiratory distress and is showing signs of deterioration.*
>
> *Doc: Can we try nasal-prongs on that patient?*
>
> *Nurse: We tried it to two days ago but he couldn't tolerate them.*
>
> *Doc: Let's try again perhaps now he is less distressed.*
>
> *Nurse: I'll try again and ask the father as well about it.*
>
> *The nurse leaves for the treatment room and comes back with the nasal-prongs.*
>
> *Nurse: I will shorten the prongs perhaps like this he will tolerate them more.*
>
> *She then leaves to go near the patient and when she comes back she tells the doctor that the nasal prongs were applied and that the oxygen saturations were improving* **[Field notes Observation 07]**.

During this encounter, professionals were problem-solving together, having equal exchange where each was contributing professional expertise. The doctor skilfully provided a reason why the nasal prongs might work this time round. This allowed the

nurse to respond positively, without losing status. The doctor welcomed the nurse's information and incorporated it in the decision taken.

The nurse's positive response also included the family in the decision being taken and added her professional expertise to ensure that the intervention was more successful. When the nurse came back to report the child's improvement, she provided information that enabled both professionals to close this episode of knotworking. Thus, this episode of IPC ended when both professionals left each other and moved on to other work. This example shows the advantage of these unscheduled transitory encounters and their importance when problems needed to be solved promptly, leading to good outcome, as shown by the patient's improved condition. In contrast, the documentation of this episode in the patient's notes and nurses' report was highly scripted.

6.5 Unscripted situations

At the end of the spectrum 'unscripted events' describe encounters that were not scripted or incompletely scripted (Steen, 2007) as they were new situations and a script was still being developed. Here, I may argue that no encounter is totally unscripted since we are social beings and even when we come across a new situation, our previously learnt social scripts influence our response and behaviour. Furthermore, in this work environment, staff knew each other well and were familiar with their work, except for a few who were new to the setting. Therefore, encounters at the unscripted end of the spectrum will be represented by events where participants stopped in their tracks to think about what to say or do next. These events were rare and atypical. I could label these situations as being new by drawing from my own previous personal experience as a clinician and also from how the participants behaved. I confirmed my provisional labelling through informal conversations with the participants after the encounter.

When I first came across the unscripted situations category, I somehow assumed that a lack of script is rather ineffectual, as participants were caught unexpectedly in new situations. However, on further analysis, I realised that such situations can be used to develop new scripts that may be invoked in the future, as will be presented here and discussed further in Section 8.6. On the other hand, if a new situation results in negative

feelings, as happened in the example about to be given, this may not create the type of collaboration desired.

The only example of a newly unscripted situation I could find in my data was the following incident, which also showed how scripts could sometimes be thrown off their normal course and break down (Schank & Abelson, 1975). Not all participants knew how to react to what had occurred. The following event may also be interpreted as a normal script being distracted or interrupted by other situations. On such occasions IPC breakdown arose when professionals did not know what was required of them, or they may not have known what needed to be done and what was the right thing to do in a situation. This presented as an obstacle (Schank & Abelson, 1975) to the flow of the script. The incident happened near the NS, which although is considered as a backstage area, is only separated from the corridor by a perceived barrier of a high desk. The consultant in this encounter was already annoyed with the nurses because they had not followed his instructions about the central venous line dressing of a patient. This incident occurred involving a consultant and four nurses:

> *Cons: "It is important because in that way we will see a pattern. Now I want to remove the line. Shall I remove it? Will you help us?"*
>
> *He turns to the nurse-in-charge* [Nurse 1]. *She is busy filing papers so he turns to another nurse* [Nurse 2] *and says;*
>
> *Cons: "Shall we get ready to remove the line?"*
>
> *The nurse* [Nurse 2] *replied that she had just handed over to another nurse* [Nurse 3] *because she was off for her coffee break. At this point, the consultant became annoyed and in exasperation turned to the nurse in charge* [Nurse 1*] and said,*
>
> *Cons: "Will you help me as the other nurse* [Nurse 2] *found an excuse?"*
>
> *The nurse* [Nurse 2] *was taken aback with this remark and took a few seconds to react she then said:*
>
> *Nurse* [Nurse 2]*: "Wait a minute … the other nurse* [Nurse 3] *is feeding the baby. She will soon be here."*
>
> *She* [Nurse 2] *was standing in the middle of the corridor, not sure whether to leave for her coffee break or to stay and assist the consultant. This was when another nurse* [Nurse 4] *interrupted the altercation and said:*

Nurse [Nurse 4]*: "The other nurse* [Nurse 3] *is coming as we have changed for the break. No, she* [Nurse 2] *did not find an excuse.*

This nurse [Nurse 4] *stood up for the other nurse* [Nurse 2]. *The consultant mumbled something that was beyond my hearing but which irritated Nurse 4 who repeated:*

Nurse 4: "No it is not an excuse, because if everyone avoids work, this is my colleague and it bothers me when someone talks like that about her. That nurse [Nurse 2] *definitely did not try to find an excuse."*

The consultant kept insisting and inferring that the nurse found an excuse not to assist him and the nurse [Nurse 4] *kept telling him that he was wrong. This was a tense moment and everyone stopped what they were doing to see what was happening. The nurse* [Nurse 4] *was behind the desk at the NS and the consultant was now in the corridor in front of the examination room. We all went quiet to see what the outcome would be. The consultant then went into the examination room and the nurse-in-charge* [Nurse 1] *who was already waiting for him inside was there to assist him* **[Field notes: Observation 17].**

Such altercations were rare and its development was the reason why I classified this encounter as a new unscripted situation. In any other event, the script should have followed a normal sequence of events, where the consultant and nurse collaborate and work together to provide a service for the patients. But in this incident, an 'error' occurred and the action commenced by the consultant was completed in an inappropriate manner. This is in congruence with Schank and Abelson's (1975) typology of when scripts are thrown off their normal course. Consequently, the outcome was not what is usually desired (Schank & Abelson, 1975). The nurse (Nurse 2) who was asked to assist the consultant had no script to guide her how to behave and react when the consultant accused her of finding an excuse not to assist him. On the other hand, the nurse (Nurse 4) who spoke up for Nurse 2 seemed to have had previous experience and may have been cued by a previous script. The nurse-in-charge (Nurse 1), who reacted by going to the examination room and waiting for the consultant, did so as she considered that in such matters the less said the better (confirmed later through an informal conversation with her). So, she also based her action on previous experience and invoked prior scripts. This shows that in one encounter, there may be different persons following different scripts, making it more complex to analyse. This event and its function will be discussed further in Section 8.6.

6.6 Conclusion

In this chapter, I considered how Goffman's (1959) concept of scripts (See Section 3.4.2) and the actual scripts could help me analyse the enactment of IPC and help me to better understand the behaviour of individuals during different types of encounters. I also adapted Gioia and Poole's (1984) spectrum of scriptedness (See Section 3.4.2) and created four key categories of scripts used in this workplace (See Figure 6.1:

- The strongly scripted (frequently experienced);
- The protoscripted (frequently experienced);
- The weakly scripted (frequently experienced);
- The unscripted episodes (rarely experienced).

Most encounters invoked one type of script from these categories (Sections 6.2-6.5). However, there were other encounters, such as the ward round that were more complex, using more than one category and thus creating a multi-level script (Chapter Seven).

The most frequently experienced script was the weak script invoked during the unscheduled transitory encounters reminiscent of Engeström's (2008b) "knotworking." The weak script enables participants to comprehend the general format of what is going to happen in a conversation relating to work in this healthcare context. However, events differ in detail and length depending on who is participating and due to the nature of the encounter. Weakly scripted encounters usually occur in an informal setting and mostly backstage without an audience. This is where most HCPs interact proactively. The low level of scriptedness allows for a greater level of collaboration to emerge from the interprofessional conversation - participants are more ready to listen to each other and take shared decisions, irrespective of professional status. The conversation during these encounters requires more thought processing and reflection because of the nature of information being exchanged. Through the formal interviews and the informal conversations, I found that participants were not appreciating enough the level of collaboration accomplished in these encounters and their importance when problems needed to be solved promptly (See examples in Sections 6.4 and 8.2).

Near the other end of the spectrum of scriptedness, strong scripts were invoked mainly during clinical procedures. A strong script not only guides professionals in what action to take, but also the sequence of the actions involved in the encounter. Predominantly, strong scripts give structure to the encounter. Thus, these scripts are crucial during encounters that need some form of safety checklist. The structure acts as a guideline to be followed, avoiding omission of important steps. Further important findings from strong scripts, such as pattern matching by doctors and consultants, will be examined in Sections 7.2.3 and 7.2.5 and discussed further in Section 9.3.

Protoscripts were invoked during formal handovers when these daily repetitive situations occurred. Although they are part of a daily routine, they are less scripted than the strong scripts guiding clinical procedures. Formal handovers are stereotypical events and a protoscript guided the flow of the encounter. Although usually, a well-developed protoscript also predicts the order in which an encounter is enacted, it also allows for more interaction and disruption. This acts as a prelude to what is to follow. During the phase immediately after handover, when the protoscript becomes weaker and less formal, participants interact more freely. Indeed, some participants wait for this weaker protoscripted phase to interact proactively.

Most rarely, unscripted encounters were observed: they were atypical or new situations and a script was still being developed. Such situations could be used to learn new scripts that may be invoked in future encounters. Unscripted encounters occur when professionals are surprised by an event or do not know what is required of them, or they may not know what needs to be done and what is the right thing to do in a situation.

Complicating matters further, during one encounter there may be different persons following different scripts (perhaps due to different levels of prior experience). This makes the encounter more complex to analyse and categorise (See excerpt in Section 6.5). During one encounter, there may be individuals, the consultant in the given example, following a strong script and having a set mind on what needed to be done next. However, when other professionals did not follow the same script, the consultant behaved ‘inappropriately,’ invoking emotional responses from those present and causing a situation where one nurse was placed in an unscripted situation.

Having considered the four contrasting categories of scriptedness which guided IPC in this setting, ranging from unscripted to strongly scripted encounters, there were situations when professionals deliberately raised and lowered the level of scriptedness to get a particular job done. In particular circumstances, this became formalised in a multi-level metascript, as examined in the next chapter.

Chapter 7 Encounters with multi-level scripts

7.1 Introduction

When I first analysed the ward rounds and MDT meetings, and scrutinised what script guided these encounters, I initially categorised them as being guided by strong scripts because of their highly routinised and ritualistic patterns. However, on closer inspection, I found that ward rounds and MDT meetings were occasions when the script was shifting from being weak, encouraging more interaction between participants, to a more rigid script that allowed participants to get through an unwritten agenda moving from one patient to the next while agreeing an updated care plan for each patient. Consequently, the ward rounds and the MDT meetings are being presented as multi-level scripted encounters, having a combination of weak to strong scripts. Details and examples of weak and strong scripts have already been given in Chapter Six.

This chapter will examine why ward rounds and MDT meetings have been categorised as multi-level scripts. Moreover, the ward round will be examined as a five-stage process, with each stage invoking different scripts that always follow a pattern (a metascript). On the other hand, MDT meetings do not follow such an established pattern but still invoke different categories of scripts during their progress and they too follow a metascript.

7.2 Ward rounds

Ward rounds, guided by a multi-level script, were highly routinised encounters that offered structure to the participants. Others have noted the ritualistic nature of ward rounds (Stelios, Fiona, & Louise, 2013) which can mimic a theatrical performance in different situations (Fox, 1993; Strange, 1996). They are very much consultant or senior doctor led and doctors give the ward round a lot of importance. This makes it a more complex script and encounter to analyse and resonates with Gioia and Poole (1984) when they affirm that different scenes, just like a play, may make up a script (See also Section 3.4.2 on scripts).

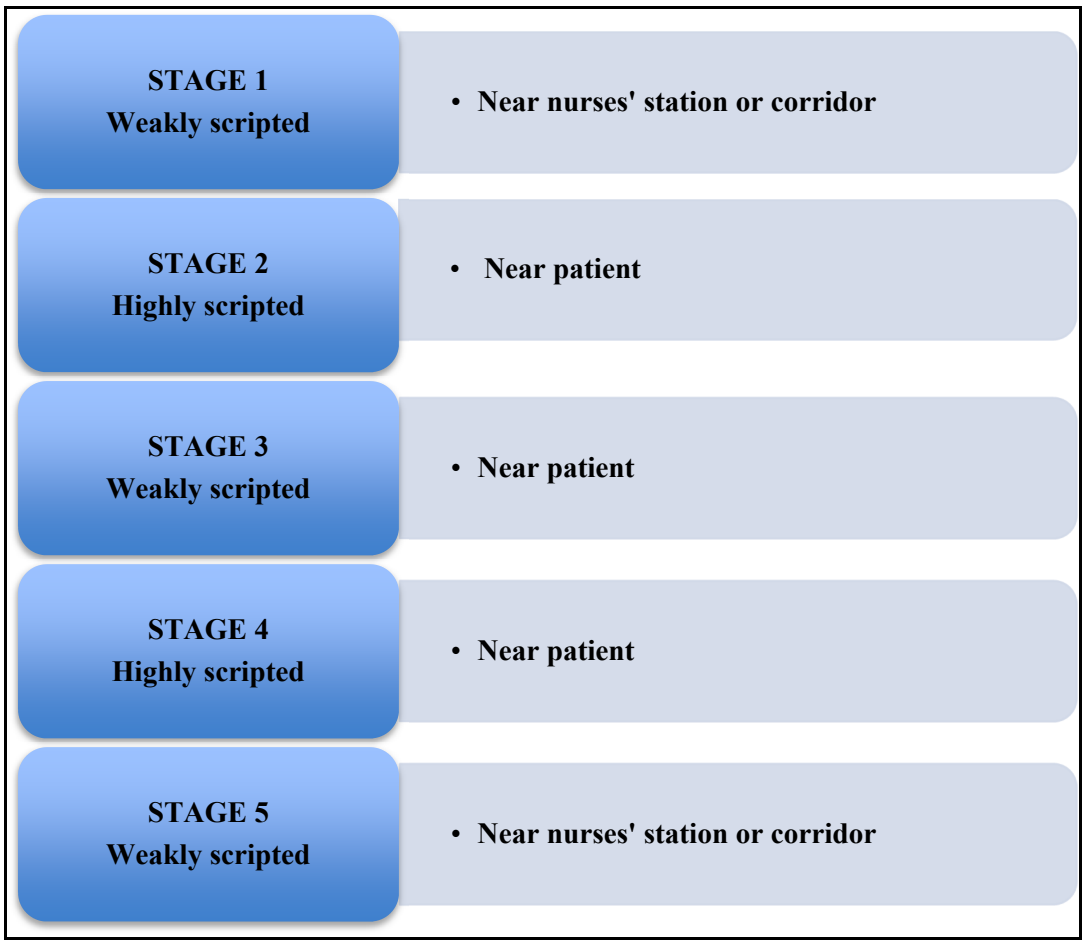
7.2.1 Overview of the five stages

To better understand the ward round script, it is best to describe it as being a five-stage process, each stage functioning as a different scene in a play. The ward round interactions are not limited to interactions at the bedside, as follows:

- The preparatory phase before approaching the beds (Stage 1, Figure 7.1);
- A period at each bedside (Stages 2-4, Figure 7.1);
- An adjourning phase away from the beds (Stage 5, Figure 7.1).

The ward round stages, varying from strong to weak scripts are illustrated in Figure 7.1.

Figure 7.1 The five-stage process of the ward round



Having categorised the ward round into five stages and going through the data regarding ward rounds, I found that there were occasions when one particular consultant did not follow this pattern. This will be further discussed in Section 9.9.1 when I discuss disconfirming cases in credibility issues.

At this stage, I observed the main contributors to the ward rounds who were predominantly the consultants and doctors, especially during the strongly scripted stages. Occasionally, during less scripted stages, other professionals, mainly nurses, as well as the patient and family also discussed the plan to see whether the correct decisions were taken. These, however, were rare occasions. The ward round is usually a regimental event, conducted in a rapid step-by-step manner, leaving very little space and time for patients and their family to substantially contribute towards the discussion, rendering Stage Two and Stage Four as very short stages. During the last stage of the ward round, participants tended to collaborate with other professionals needed in the case over the telephone or asynchronously through some form of documentation. The five stages will be individually presented next.

7.2.2 Stage One

In the weakly scripted Stage One, before the ward round entourage moved next to the patient, the HCPs and doctors belonging to a firm (which was led by a medical consultant, See glossary) met near the NS and the doctors briefed the consultant with any changes that had occurred since the last time he/she saw the patient. The consultant asked questions to clarify new information. This stage usually happened backstage and had an informal nature to it. The following are examples of this:

> *(...) I wait at the NS for the consultants to come. In the meantime, in the corridor next to the NS where the files trolley is kept, two doctors are preparing for the ward round, discussing an NAS [neonatal abstinence syndrome] baby with the nurse-in-charge. They ask her about the parents' visits and how the baby is feeding. The nurse answers and gives the requested information and the doctors listen attentively.* **[Field notes: Observation 18]**

> *Before entering the room, the doctor updates and briefs the consultant on the child's history for the last few days* **[Field notes: Observation 30].**

It was the consultant or senior doctor who mainly asked the questions and the other professionals answered them. It was like a rehearsal of a play before appearing

before an audience, with the consultant or senior doctor in the main role. During this stage, it was mainly the doctors who were giving information but sometimes, the consultant specifically addressed another profession with regards to the patient being discussed. This was the space where those attending the ward round discussed results from any on-going investigations to be conveyed later to the parents or patients. Therefore, different professionals, mainly doctors and nurses, took the opportunity to obtain and share patient information to be properly informed when they met the patient and his/her family. After this initial preparation for the group of patients to be visited, the consultant usually led the team by physically moving to the patients' bedsides, Stage Two. The consultant's action signalled the moving from one scene (and level of scriptedness) to another.

7.2.3 Stage Two

The highly scripted Stage Two is when the group first approaches the patient and the most senior doctor, usually the consultant, greets the family and physically examines the child. I considered this to be frontstage and formal. This was how I described the main events of this stage in my field notes:

> *This ritual starts by the consultant greeting the mother and child in Maltese. Then, with the mother holding the child in her lap, the consultant sits in front of them and examines the child. He is very much in control of the situation and conveys confidence. He asks questions in Maltese, directing them to the mother. Whilst the consultant examines the child, he verbalises his findings in English and one of the doctors writes these down in the child's notes* [All hospital documentation is in English]. *The medical student, nurse and I watch. The consultant tries to play with the child in what I assume is an attempt to distract the child.* **[Field notes: Observation 05]**

This is a common flow of events in Stage Two. I observed that during this strongly scripted stage, no-one interrupted the consultant or doctor performing the examination and even the parents only spoke when prompted. This was when information about the patient was gathered and documented in a highly scripted pattern, to be later evaluated and included in the new care plan. I noted that the consultant continued to stand next to the patient and then moved to face and address the rest of the group in the ward round, Stage Three. So once again, it was the consultant who signalled the move for the next scene.

7.2.4 Stage Three

The less scripted Stage Three occurs when a discussion about the findings ensues and where the patient, family and other HCPs contribute to the discussion. I observed that during this stage, laboratory results or any change in treatment were sometimes discussed with the parents and other professionals. Although frontstage, it is a more informal stage of the ward round. The next excerpt reveals what kind of discussion occurs in Stage Three of the ward round when a more informal mode of discussion is adopted. The patient being reviewed was a 15-year-old boy, who was terminally ill:

> *We enter the room and the consultant greets the boy who is around 15 years of age. His father accompanies him.*
>
> *Cons: "What are his vital signs?"*
>
> *The nurse-in-charge answers while looking at the charts in the patient's profile. She also reports that the patient is in pain, has mouth ulcers and diarrhoea. While the consultant is examining the patient, the nurse-in-charge teases the patient about the football team he supports. It is as if she is trying to restore some normality in such a morbid situation. At first the consultant tries to stop her and shows her he is annoyed, but I could see that being a senior nurse, she was used to the consultant's way of communicating and the banter continues. Finally it is now the consultant himself who joins in and teases the boy.*
>
> [This is the month of the World Cup and since Malta never qualifies for the finals, the Maltese often support different teams from other countries mostly the English and Italian teams. The debates can be quite fanatical where these two teams are concerned].
>
> *They all joke and pass comments about Italy who is also now out of the World Cup.*
>
> *The father and patient express their distress about the symptoms and discomfort, which are a complication from the chemotherapy. The consultant listens attentively and gives them his full attention. Therefore, a discussion among all present ensues to try to make the boy more comfortable and relieve the pain. So they decide what mouthwash to give for his mouth ulcers and how to control the diarrhoea.*
> *The father nods in agreement and seems satisfied with the decisions taken but the patient remains looking apprehensive.*
>
> *The nurse-in-charge writes the information in the ward-round-book. Before leaving the room, the consultant summarises what has been decided, looking at the patient, father and nurse as if to seek their approval.*

Cons: We are not changing anything major in the treatment regime except for the mouthwash.
They all nod in agreement. **[Field notes: Observation 30]**

I observed that the more informal aspect of this stage encouraged more participation from those present, including the patient and family, even though this was minimal. The consultant did not rush through the review and allowed time for the participation of all those present. The nurse held a senior position and perhaps this is why she confidently handled the situation. This consultant involved the patient and family in the decisions being taken and also sought the nurse's approval. However, I have also observed instances when this was not always the case. Some consultants would very briefly (even superficially) consult with patients, families, and other professions.

During my observations, I noted that after the discussion phase, the consultant usually moved to the foot of the bed or near the bedside-table where the junior doctor was writing down the findings in the patient's notes. This was the consultant's signal to move on to the next scene, Stage Four.

7.2.5 Stage Four

Stage Four, which still takes place at the bedside, is when the script becomes highly scripted again, making it a more formal phase of the encounter. This is when the consultant and doctors summarise what has been discussed and decide on what is required next as reflected in my field notes:

The doctors continue to discuss the treatment and write down information in the patient's notes and update the charts. **[Field notes: Observation 30]**

During this stage, the attention of those present on the ward round reverts back to the doctors while other professionals play a more minor role. At this stage, junior doctors are able to document what the senior doctor or consultant is dictating and from which they are able to gain experience from their peers.

On inspecting the strongly scripted written document, after my session of observation, I noted that the scribing doctor had only written what the consultant had dictated. Despite having listened to what the nurse and family had to add to the

discussion, the scribing doctor had not included their contributions in the documentation. Once I had become aware of this, I was interested to find out if this was just an isolated situation. In fact, I noted that this was consistent throughout all ward round observations and will be discussed in Section 9.4.1.

7.2.6 Stage Five

Stage Five brings us to a new scene. The ward round group, led by the consultant or the most senior doctor move away from the patients and the encounter becomes backstage and informal again. This is the stage when a handover of the decisions taken during the ward round (especially if it was urgent) is given by the doctors or by the nurse accompanying the ward round,

I noted that this was when the ward round script became weak again and there was more interaction and exchange of information with other professions. Nurses who were looking after the patient could discuss the decisions, especially if they had not been present near the bedside. At times, this stage was a matter of coordinating care tasks and more commonly known as interprofessional coordination (Barr *et al*., 2005; Reeves *et al*., 2010). However, I also noted that IPC was very evident during this stage.

During Stage Five, nurses and doctors also collaborated with other professions synchronously by telephone or asynchronously through some form of documentation. Thus, IPC was also happening asynchronously as part of the ward round. However, asynchronous IPC might also occur in other stages when reference is made to blood results, x-rays or reports from non-ward round HCPs. I observed that this kind of asynchronous IPC is nested within synchronous ward round IPC across the five stages.

Therefore, I observed that professionals are usually able to move effectively from stage to stage and from one level of scriptedness to another, mainly led by the consultant or senior doctor leading the ward round. In the daily routine of the ward round this is a habit, so transitions are well understood and almost always enacted. However, I also noted that consultants sometimes close a particular stage before the rest of their colleagues are ready to move to the next stage, creating some interesting

and sometimes challenging dynamics as you have different members in the group enacting different stages of the ward round at the same time, making it more complex to analyse.

7.2.7 Summary of the five-stage process

Therefore, the five-stage process of the ward round has the potential for various types of collaboration between different professions and the patients and their families. What mainly happens during the ward round is that doctors update their clinical knowledge about the patient because they are not present all the time. From my previous clinical experience coupled with observations for this study, I can confidently say that this encounter is often the only one doctors have with patients for that day except when a patient's condition deteriorates and doctors are called to review the case. Indeed, consultants and doctors therefore place a great deal of importance on the ward round.

During ward rounds, doctors receive information from their own examination of the child, by referring to strongly scripted notes and charts written largely by doctors, but also by nurses, or other professionals who may have visited the child. They also often ask the allocated nurse, the nurse/s on the ward round, the child and family members some questions, depending on the case. Gaining this information allows the consultant to acquire an updated clinical picture of the child, which guides him/her to produce a new plan. Consequently, the collaboration that takes place is mainly the joint understanding by everyone present rather than jointly constructing that plan.

During my observations, I also noted that people also questioned that plan to make sure they understood and discussed the plan to satisfy themselves that the correct decisions were taken. The discussion was usually between doctors, or doctors and nurses, and also included the child and family. Other professions were mainly contacted by telephone, or by using referral forms or written notes. Other professionals' minimal contribution to the ward round mainly comprised of communicating information through patients' notes or by the nurses using verbal communication either face-to-face or over telephone. During ward rounds, participants also pooled information which they had purposely selected to be shared with other professions.

Ward rounds also generated work that became the responsibility of colleagues from several professions. Most acts involved changing treatment, ordering new investigations, taking decisions whether the child required further hospitalisation or could be discharged. It also included requests for follow-up appointments or patient referrals to other professionals. Therefore, other professionals rely on the ward round to be able to commence or follow up on patient care. The level of IPC involved in this transfer of work (discussed in Section 4.4) influences how holistic care is delivered.

I also noted that the more informal the ward round stage was, the more interaction between professions and families took place. The more formal the stage, the more doctor-dominated it became and the less other professions contributed to the discussion. This changed somewhat when more experienced staff were present as they were more confident in interacting with other professions. The participation of other professions also depended on how included and needed they felt in the group.

The combination and interweaving of weakly scripted and strongly scripted stages is what makes the ward round a complex script to analyse. Such scripts are discussed further in Section 9.4.1.

7.3 Multidisciplinary team meetings

The multidisciplinary team (MDT) meetings observed in this setting also followed a multi-level script although they were not as complex and structured as the ward round. I noted that in the MDT meetings, there was usually an unwritten agenda that allowed participants to follow a non-sequential pattern. This agenda also gave space to the participants to side-step the agenda and discuss any relevant issues which invoked controlled script processing. Therefore, MDT meetings alternate between strong scripts and weaker scripts with a less predictable pattern, depending on the patient being discussed and the professions present.

In this setting, two types of MDT meetings were conducted and participants referred to them as **'patient case conference meetings,'** which were held occasionally in all

wards (See Section 7.3.1) and **'ward round meetings,'** which were only held regularly in one of the four wards observed in this study (See Section 7.3.2).

7.3.1 Patient case conferences

The patient case conference meetings generally relate to patients with long-term treatment, such as following trauma from motor vehicle accidents and other head traumas; or who need long-term rehabilitation, such as chronic cases, for example cerebral palsy and patients with learning disabilities. Cases might also include children with several social problems.

These conferences include the greatest range of professions collaborating synchronously in this setting. It is, however, usually the consultant who asks all the professions involved in the case to meet and discuss the on-going care plan or discharge planning for the patient. Different professions can take the lead during this meeting. One of the consultants confirmed this:

> *... but someone in different situations must take the lead. (...). I am a **member** of the team ...* **[Formal Interview: Consultant]**

The initial part of this meeting is rather strongly scripted, updating the rest of the group about the case that is to be discussed. Representatives of the professions involved in the care of this patient would also be present. It was usually the professional involved in the specific case who would attend these meetings, thus having first-hand knowledge about the child. The range of professions that potentially participate in these encounters is listed in the next excerpt which also presents an example of the format of the meeting:

> *The child being discussed is recovering from a severe head injury following a motor vehicle accident. The group in the meeting consists of two consultants* [the second one was involved because the patient was an asylum seeker and so under child protection services]*, a speech therapist, two occupational therapists, two social workers* (one based in paediatrics and one from AWAS -Association for the Welfare of Asylum Seekers)*, a physiotherapist and the nursing manager of the ward. The meeting starts with the consultant giving an overview of the child's situation and then she opens the floor to the other professionals. She tries to give some structure to the meeting as everyone is talking at the same time and she asks for the report of the home visit.*

Therefore, the occupational therapist and physiotherapist report back what they had observed during their visit and spoke positively about the flat where the family is going to be housed. This particular family is a Syrian family that came by boat across the Mediterranean as irregular immigrants. The flat they are moving into is being rented out through a charity and they have had their rent paid for the first three months.

The social worker updates everyone about what social benefits are available and what the family can benefit from. Apparently, the family does not want to seek refugee status. The team also discusses the state of the parents. The nurse gives input regarding the family dynamics, as she and the other nurses are the ones in constant contact and worry that perhaps the father was not a frequent visitor.

The conversation is a relaxed one and everyone seems to feel free to speak out. The hospital social worker updates the AWAS social worker that she has applied for support for when the family is discharged. **[Field notes: Observation 23]**

In the meetings that I observed, I noted that some professions who could be important for the child were missing. For example, there were no representatives from the education department or from community services. When I asked about this, the nurse-in-charge said that this was a common occurrence in these meetings. Therefore, after the initial formal, strongly scripted beginning, the meeting progressed to a more informal weakly scripted manner. This phase was when different professions would contribute their knowledge and report on the progress (or not) of the child. Although the meeting in this excerpt started out as a discussion on the child's progress and how to update the care plan while he/she was hospitalised, after various professionals' contribution, the team decided to send the child home for a few hours during the weekend to see how the family would cope. Most of the time, the main consultant led the discussion and at other times other professionals took over, depending on what was being discussed. They all spoke proficiently and within their scope of expertise. The child's physical, emotional and cognitive abilities were discussed.

Despite the participation of different professions, it was still the consultant who generally took the lead and, unlike during the ward round, she documented any decisions taken. I noticed that there were no junior doctors present who could have taken on this role as happens in the ward round. Once again, the write-up and summary of decisions taken became strongly scripted. However, as with the ward round notes, the consultant wrote concisely in the patient's notes and followed a

strong script to document what was decided. There was so much more being discussed than what the consultant documented. This highlights the importance for representatives of all the different professions involved in the case to be present so that they are more fully informed of the discussion. They could then brief their colleagues on the outcomes of the meeting. At least this is what I assumed. It was outside the parameters of this study for me to follow up on the different professions as each went back to their own department. However, I did observe that the named nurse looking after this patient for that day was briefed by the nurse-in-charge and she followed this up by looking in the patient's records. Therefore, documentation and verbal handover were mechanisms that compensated for the fact that it is not practical for all professionals to be present for the MDT meeting.

What started out as a meeting to discuss the child's progress, ended up devising a plan to discharge the child, which was always the long-term goal. This was possible because of the synchronous input and participation of all those present and the consultant's willingness to invite participation from all professions.

This encounter provided an opportunity for all professions to come together and synchronously collaborate to solve problems and provide a service to the patients, using a multi-level script which allowed all professionals to move between strongly scripted phases to less scripted ones.

The transition from one level of scripts to the other is more eclectic in the MDT meetings than in the bedside ward round. During these meetings, all professions contribute to the discussion, some more than others, especially when the topic is within their area of expertise. Although a weaker script allows room for all professionals to speak out, it also results in some professionals being more outspoken than others. During one meeting that I observed, the physiotherapist and one of the occupational therapists were dominating a meeting. This could be due to these two professionals having more information to share after having assessed the patient's home. Therefore, it is important that the person leading the meeting gives a chance to those less inclined to participate.

I also note that in these meetings, there was a certain amount of pressure caused by the limited time available before the family was called in. The different professionals needed to negotiate and collaborate to present a united front when the patient and family were present. This is where a strong script served its purpose. This pressure drove the professionals to be quick yet comprehensive in the decisions taken. Such pressure was distinctive to these meetings and may not be present in other backstage interactions, such as handovers. Also, the team members needed to welcome any contributions from the patient and family that may alter previous decisions and that is when the script became weaker.

A reason why strong scripts are important in these meetings is that it may give more structure to the meeting and perhaps, allow opportunities for all the different professions to contribute to the meeting. Strong scripts provide participants with an agenda, based on previous meetings, on what needs to be discussed. On the other hand, weak scripts also give opportunities for professionals to participate in the conversation, one that can become dominated by outspoken individuals overpowering the introvert ones.

In the example given above, the nursing manager was the one who spoke least during the meeting and only spoke up towards the end, when it was time to invite the patient and parents in for the meeting. Remaining silent or speaking only when spoken to does not mean that the nurse had nothing to say. It could be that the nurse was waiting for the right moment to share her knowledge, allowing other professionals to share theirs. Perhaps this could be the result of different professions having different priorities, values and goals and thus different agendas. It could also be an issue of power, status and culture. These case conference meetings gave the chance for different professions to share their expertise and knowledge about the case in question resulting in IPC and having each profession contributing a piece of the jigsaw puzzle.

7.3.2 Ward round meetings

The ward round meeting is held regularly every fortnight (sometimes weekly, depending on requirements) in just one of the wards in this study setting. During this meeting, professionals discuss the current patients on the ward and also those

attending for continuing treatment on a daily basis. Different levels of scripts are invoked purposely as the meeting progresses.

The ward round meeting is mainly led by the only medical consultant for this ward. They are held early in the morning, after the formal handovers so that the night-shift staff can also attend, but before the ward round begins. They are backstage meetings attended by doctors, nurses and, sometimes, other staff. Two of the interviewed participants who experienced these meetings on this ward or in other hospitals in other countries, expressed their wish that these meetings should be held more regularly in all paediatric wards. They could see the benefits the patients and staff gained from such meetings and how IPC could be enhanced through them. During these meetings, professionals meet to update each other on the progress of the inpatients, as well as discuss those patients being followed up at home but who still came to the ward for treatment. These meetings also support the work of the ward and interprofessional team, more generally.

As with the patient case conference meetings described in Section 7.3.1, ward round meetings are guided by a multi-level script that normally follows a predictable pattern but is adapted by participants as priorities emerged. This acts as a guide for the whole meeting but especially when moving from one patient's notes to the next. The strong script invoked at the beginning of the meeting and at the beginning of each patient case, gives structure to the meeting, focusing on reviewing and updating shared understanding of the care, context and progress of each patient. The weakly scripted phase that follows, prompts the consultant to ask the other participants if they have anything more to add before moving to review the next patient. This usually gives the opportunity for other professions, mainly nurses, to share their knowledge and discuss each patient, which encourages IPC.

The professions I observed attending the ward round meetings were usually doctors, nurses and nursing assistants. However, during the interviews participants did mention that other professions were included occasionally, depending on the patients' needs (for example, psychologists, pharmacists, physiotherapists as well as surgeons). The following extract from my field notes describes the beginning of a typical ward round meeting and some of the discussion that ensued:

As usual the meeting is held in the playroom. I sit in a place where I can see everyone. There are more people today namely the consultant, a doctor, the nurse in charge, five other nurses of whom two are from night duty, one medical student and myself.

The consultant arrives early and arranges the room in a semi-circle, clearing away some toys which are lying around (...). The rest of the staff join in, some carrying a mug of coffee. The consultant starts briefing everyone about the first patient. They are having trouble controlling her blood glucose. Everyone starts talking at the same time and the consultant stops everyone:

Cons: "Tell me about her glucose" [while looking at the nurses].

Nurses: "9.6, 7.5... that range." **[Field notes: Observation 32]**

This excerpt highlights that, the consultant was once again the leader in this meeting. It also shows how nurses usually spoke when they were asked for information and not otherwise. This was observed in most ward round encounters. The exception to this seems to be when the nurse holds a senior role and is therefore more experienced. Therefore, when asked by doctors, nurses usually provide short factual answers, but when nurses are more experienced, they also contribute to the case proactively, especially when aspects of psychosocial care need to be discussed. This is when the script became weaker.

Apart from discussing each patient on the list of inpatients and day cases, during weakly scripted phases, participants also discuss issues that concern the ward or team. During these weakly scripted phases, different professionals are encouraged to bring forward any problems they encounter on the ward, and to also report system or equipment changes or innovations. I observed that together, the whole team tried to solve, mitigate or at least acknowledge the problems that were present. For example:

They [nurses and doctors] *discuss what type of central line catheter to insert in a particular patient and both nurses and doctors give their opinion as to which one is best for the patient. While on the subject of central lines, the senior doctor also refers to information obtained previously from the nurse-in-charge and he listens to what the nurses have to say about a new brand of central line catheters that they are using. The consultant asks if they are encountering any problems when using them. They report no problems so far but that they had just started using them.* **[Field notes: Observation 29]**

In contrast with the ward round which occurs next to the patient (Section 7.2), this meeting provides a slower-paced encounter, where professionals share and learn new information about each patient and some more general matters pertinent to the work of the ward and team. They also use this opportunity to discuss issues that are worrying them and which should not be discussed in front of patients and families. The following example also emphasises that the consultant is generally the one initiating the discussion, although one of the senior doctors would also sometimes take the lead:

> *Sometimes the consultant addresses the nurses and at one point, he asks if they are having problems with the 'port-a-cath'* [see glossary] *of a particular patient. The nurses report that there were no problems. A discussion follows about another patient who has a 'Hickman line'* [see glossary] *and they discuss which lumen to use for drawing blood. With the participation of both the nurses and doctors they decide to use the red lumen for obtaining a blood sample* [this device has two colour-coded lumens] *and leave the other one for treatment*.
> **[Field notes: Observation 32]**

I observed that the consultant also used these meetings as an educational exercise to encourage IPC. He asked challenging questions and was ready to take the time to explain when someone did not follow. I could see that sometimes, this questioning kept the participants (mainly nurses) focused and may have inhibited individuals from participating in fear of being asked further challenging questions. This resulted in the nurses behaving in a slightly anxious manner and, what was intended to be an informal weakly scripted phase, sometimes became tense and unscripted, introducing another category of scriptedness in this meeting. I could sense this tension during the meeting and two participants also confirmed it through informal conversations after the meetings. It was usually the more experienced staff and therefore more confident ones who answered the consultant's questions, although the more junior staff were encouraged to participate in the discussion that followed. I observed that staff, who had participated in such meetings, were more informed about the patient and family and participated more during the ward rounds, thus enhancing collaboration.

Despite all the benefits of these ward round meetings, participants acknowledged that they were not always easy to organise and even harder to get other professions

to attend. However, with some effort, this could be accomplished and other professionals were generally willing to attend when invited. A consultant stated:

> *The problem here is that having multi-disciplinary team meetings is not very easy although it is desirable, it is very difficult to organize. But we do manage to get all the people involved in a certain … in a particular case on board with the treatment and discussions (...) Here it is very important that all the professionals, that is paediatricians, nurses, psychologists, physiotherapists etc. who come to the (...) ward? And are involved in the care of a patient should be on board with what is happening with the family, with the patient, what is happening to treatment, what the social problems are, what the psychological problems are, and so on and so forth. Yes, so yeah, it is important that there is a lot of collaboration all right between staff.* **[Formal interview: Consultant]**

7.4 Conclusion

This chapter focused on the multi-level scripts that were adopted during the ward rounds and the MDT meetings. As mentioned above, the ward rounds are routinised encounters that offer a strong five-stage structure to the participants (Sections 7.2.2-7.2.6). Ward round participants shift from stage to stage, and between weaker and more strongly scripted interaction at the signal of the consultant. The IPC achieved during ward rounds is mainly 'joint updating' on relevant matters and 'joint understanding' of a care plan, devised mainly by the consultant and doctors, rather than 'joint construction' of a plan.

MDT meetings also follow a multi-level script but each type of meeting does not follow the same pattern. There are two types of MDT meeting, the 'patient case conference' and the 'ward round meeting.' During the strongly scripted phases, it is mainly the consultant or senior doctor who contributes to the meetings. On the other hand, other professions contribute more during the weakly scripted phases in a flexible manner. In MDT meetings, the multi-level scripts shifting between strong scripts and weaker scripts has a less predictable pattern than the ward round stages. The most important aspect of the patient case conferences is that these meetings include the greatest range of professions collaborating synchronously in this setting.

Despite the participation of different professions, it is still the consultant who mostly takes the lead in these meetings. The input and participation of the other professions depend on the individual's agency (especially during weakly scripted phases) and the

consultant's willingness to invite participation from all professions. On the other hand, strong scripts are generally efficient even though participants had the extra pressure that within a limited time, they need to negotiate and collaborate effectively to be ready to present a holistic plan to the family and patient, either after the patient case conference meetings or the ward round meetings.

Chapter 8 The different encounters, the scripts they invoke and IPC

8.1 Introduction

In Chapter Four, I reported that the most common act during IPC encounters was that of information exchange. This then led to other facets of IPC, such as sharing decisions, gathering of more information, negotiating care plans, performing clinical procedures, challenging assumptions by different team members and seeking clarification. In Chapters Four, Six and Seven, which focused mainly on synchronous, face-to-face IPC, each of these elements were studied and supported with data excerpts. Synchronous IPC was supported by asynchronous acts and reviewed in Chapter Five, where information exchange was also prominent.

The focus of this particular chapter is to look more deeply into the functions of the different scripts during IPC encounters, and to consider how they function and the type of collaboration which can be achieved. In Section 8.2, I study the day-to-day unscheduled encounters guided by weak scripts. This was the most common type of IPC encounter observed in this setting. These encounters supported other IPC encounters, such as the ward round. In Section 8.3, I consider the type of IPC that aims to provide holistic care by invoking multi-level scripts, using examples of daily ward rounds and the less frequent MDT meetings. IPC during clinical procedures following strong scripts is tackled in Section 8.4, while formal handovers which are guided by protoscripts are considered in Section 8.5. Rarely observed new situations without scripts are studied in Section 8.6. Finally, competing scripts and rare encounters that challenge power and invoke transgression of scripts are the subject of Sections 8.7 and 8.8.

8.2 Day-to-day unscheduled IPC encounters invoking weak scripts

Having studied these weakly scripted, yet frequently experienced encounters and the functions they perform (Section 6.4), I believe that these frequent encounters are necessary and important to progress through the day-to-day work in this setting.

These encounters usually happen in the corridors or near the nursing station (NS). What mainly happens here is that various professionals, including others from different departments and disciplines, briefly work together in an informal setting to solve a problem or provide a service to the patients. They also took shared decisions related to the care-plan or treatment needed by patients. The familiarity of these frequently experienced "knots" (Wagner, p. 168, cited in Engeström, 2008b) is perhaps what encourages participants to collaborate (See Section 6.4, Excerpt One). Therefore, the level of interprofessional collaboration (IPC) in these encounters, influenced by a weak script and in such an informal setting, is better than those situations invoking strong scripts.

In interviews, participants did not give much importance to these unscheduled (normally brief, backstage and relatively informal) encounters. However, I noted that these were very important IPC encounters, which helped with day-to-day problem solving and decisions. Being guided by weak scripts, these encounters had the advantage that participants actively processed information together and took decisions and actions accordingly. Therefore, weak scripts provided the opportunity for professionals to think and discuss issues together. Since the weakly scripted encounters were experienced frequently, they also became familiar to participants and perhaps seemed less threatening and more equal than more strongly scripted encounters led by consultants, such as the ward round (discussed further in Section 8.3.1). The informal aspect of how these were enacted and the fact that they were mainly backstage encounters may have helped to encourage more interaction. Although they were frequently encountered, they still invoked weak scripts rather than strong scripts, which normally emerge when similar encounters were frequent. However, the dynamic nature and different content of each encounter initiated by different people and involving different individuals, prevented a stable but weak script from emerging. I also noted that weakly scripted encounters can possibly 'repair' (bring the encounter back on its normal course) things when previous encounters do not go so well and so need more attention and reflection (discussed further in Section 9.2.1).

After prolonged immersion in the field, plus my persistent observations of the day-to-day practices in this setting, as well as analysing the data corpus and drawing

from Reeves and colleagues' analogy, I noted that these frequent, brief and fluid backstage interactions were the 'oil' (Reeves, Meyer, Glynn, & Bridges, 1999; Reeves & Lewin, 2004) (See Figure 8.1), that kept the engine of IPC going in this setting. Yet, during interviews, most of the professionals tended to speak only of IPC occurring during formal interactions, such as ward rounds and MDT meetings. Thus, participants may not be aware of the importance of these fluid interactions and how this knotworking (Engeström, 2008a) helps the overall day-to-day problem solving when caring for their patients.

Figure 8.1 Weak scripts: The oil that keeps IPC going

Recommended for:

- The day-to-day problem solving;
- Handover after the ward round;
- Repairing IPC;
- Problems that needed reflection.

A drawback of weakly scripted day-to-day unscheduled IPC encounters is that it is unstructured and not always acknowledged, which may render this way of enacting collaboration invisible (Nardi, Whittaker, & Schwarz, 2000). Furthermore, unscheduled weakly scripted encounters potentially allow aspects of care to be left out and communication breakdown could occur. This can happen because these encounters are also mainly held in a place where professionals are more likely to be interrupted or distracted.

The nurse in the following excerpt emphasized that having good relationships with other professionals was not enough. These relationships needed to be sustained by

good communication skills, especially when transferring work during the unscheduled interactions, such as what happened after the ward rounds:

> *Int: When you say that things are skipped* [omitted] *... ?*
>
> *Nurse: I don't know, maybe that a handover hasn't been done properly.*
>
> *Int: Things were not communicated. Ah ha.*
>
> *Nurse: A good handover was not given. These things have happened but on the whole ... I see that on the whole, there is a good handover between us and between ... and with the doctors.* **[Formal Interview: Nurse]**

When this nurse mentioned that, at times, there was communication breakdown during handover, she attributed this obstacle to mainly having several ward rounds running simultaneously and that a proper handover was not always given after the ward round. This emphasises the importance of these unscheduled encounters, the quality of communication skills and their follow-up if IPC was to be achieved.

Other negative aspects of these weakly scripted unscheduled encounters that mainly occurred in public places included compromising patient confidentiality when passers-by overhear conversations. These encounters are also interrupted by noise or other activities, creating noise themselves and disturbing patients who are nearby and occluding what might be a busy corridor. Thus, unplanned encounters can also result in being unproductive (Bleakley, 2013).

I noted that while weakly scripted encounters may be vital 'oil' for IPC in this setting, they were not sufficient and needed to be augmented by other encounters, guided by a variety of scripts, such as those studied in Chapter Six (Sections 6.2 to 6.3.2) and Chapter Five. A list of when weak scripts worked well is given in Figure 8.1.

An interesting phenomenon is the use of an apparently weak script by an experienced professional who is attempting to advise a professional with a higher status but who is less experienced or knowledgeable. For example, the final quotation in Section 4.3 showed an experienced nurse apparently invoking a weak script to suggest to the doctor what medications the child needed. However, the

nurse may have been guided by a stronger script and made it appear like a weak script, so as not to present himself as telling the doctor what to do. This resonates with the 'doctor nurse game' (Stein, 1967; Stein *et al*., 1990).

Having findings indicating that these weak scripts resulted in more interaction and exchange of information between different professions than in other types of encounters, I shall argue that despite the benefits of strong scripts discussed in Section 6.2, and despite the unstructured nature of these weakly scripted encounters, weak scripts continue to present an excellent vehicle to carry IPC. These scripts' functions were mainly encouraging sharing decisions, gathering of more information, negotiating care plans, challenging assumptions by different team members, and seeking clarification. Although these functions and acts may also be applicable to other encounters, the day-to-day unscheduled encounters were where these were mostly observed. As argued above, weak scripts allowed more opportunity for active thought processing of information among different professions, resulting in more participation.

8.3 Holistic care through invoking multi-level scripts

As already illustrated in Chapter Seven, during my observations I noted that there were certain encounters, such as the ward round and the MDT meetings that intentionally invoked a multi-level script, shifting from strongly to weakly scripted levels. This allowed participants to act according to what the situation required of them, addressing the holistic needs of the patients and families. This is discussed further in Sections 8.3.1 and 8.3.2 where the issue of dealing with instances when the multi-level script did not function well is addressed. I also consider how participants overcame these malfunctions.

8.3.1 Ward round script

In Section 7.2, I stated that the ward round script followed a multi-level script, despite its highly ritualised and routinised structure. The five-stage process of the ward round was also a mix of being a formal and less formal encounter that happened mainly frontstage with some stages being backstage. The formal frontstage aspect resulted in the ward round being dominated by the consultants and doctors.

More automatic thought processes (Section 3.4.2) occurred during the formal stages Stage One (Section 7.2.3) and Stage Four (Section 7.2.5) of the ward round, when clinicians considered treatment, diagnosis, prognosis and formulated potential care plans. They thought rapidly and used pattern-matching (discussed further in Section 9.3) with previous cases. They were not necessarily thinking about the next stage in the communication process, as they would during a more weakly-scripted stage or encounter, but they focused on present clinical thinking. I also stated that there were stages when the script became weaker and this was when different professions, mainly nurses, and the patient and family were given the space to interact and collaborate, invoking more active thought processing scripts (Section 3.4.2), making it a more inclusive encounter as individuals participated more in the discussion. This made the ward round a complex and multi-functioning script.

The participation of other professions during the stage where the script became weaker depended not only on the individuals' willingness to participate but also on the consultant's readiness to include others. Despite the other professionals' (mainly nurses) participation in the ward round, the consultant remained the lead performer in the encounter and all other professionals played secondary parts. This was the central narrative of all stages of the multi-level ward round script. Consequently, in this setting, the consultant (or senior doctor) leading the ward round was the key player in promoting, maintaining or inhibiting ward round related IPC. Therefore, the level of IPC in the ward round very much depended on who was leading it.

Other professionals, such as the pharmacists and physiotherapists were often contacted using the telephone after the ward round or through referral forms, resulting in asynchronous IPC at times (Chapter Four) and further synchronous IPC at other times, depending on the means of communication used.

From my prolonged immersion in the field, I observed that there were instances where the multi-stage ward round script worked well and all participants were included and informed. The routine of the ward round and its strongly scripted stages could be considered as a safety net so things were not missed out. When the team was next to the patient, an unwritten agenda ensured that the whole team was included and heard at some point and the ward round ritual was consistent. These

were some of the benefits of strong scripts (discussed further in 9.4.1). Despite the security offered by following a strong script in certain stages, there were instances where the ward round script worked less well and important information was missed, or some participants were left out of decisions. The following excerpt is an example which focuses on the importance of Stage Five of the ward round script, namely handing over of decisions to those not present during earlier stages (Section 7.2.6) as well as the difficulty of ward nurses always being able to attend Stages One to Four (Sections 7.2.3 to 7.2.5) of every ward round:

> *Nurse: Let me say this, on the whole, we have a good relationship and so when it comes to the handover* [ward round script Stage Five] *... but sometimes they do skip* [omit] *things. Because, for example, when there are ward rounds happening at the same time, keeping up with the ward rounds is, ehm, difficult. When doctors come at the same time, for the nurses to manage to go with everyone, with that one, sometimes the handover and such things don't take place. In other words, sometimes things are skipped but on the whole …*
> **[Formal Interview: Nurse]**

Omitting proper handover after the ward round (Stage Five, Section 7.2.6) could also result in fragmented care. Different professionals also found other ways of repairing or reversing what was decided in the ward round, especially if they had not been present for the ward round. These actions were, however, confined to certain circumstances and used when appropriate. Professionals usually opted for the less formal, weakly scripted stage after the ward round, Stage Five, or even possibly later on, to discuss any outstanding issues as explained in this excerpt:

> *Nurse: "Has Consultant 7 discharged* [patient] *Number 14?"*
>
> *Ward Clerk: "No."*
>
> *Nurse: "No? Let me check what he* [the consultant] *wrote."*
>
> *And she checks the history file, complaining that she cannot read the doctor's handwriting. She goes to the mother to confirm what the doctor told her. She comes back talking loudly to herself:*
>
> *Nurse: "He is not discharging him. Isn't his mother a nurse? He is ready to go home. Let me talk to the doctor."*
>
> *And goes off to discuss this with the doctor.* **[Field notes: Observation 3]**

In the discussion that followed this excerpt, this nurse first reminded the doctor that the child's mother was a nurse and that she was willing to take the child home and bring him back for review at outpatients. She also briefed him on the morning's positive findings and after further discussion, the doctor agreed to discharge the child. The way this nurse tried to reverse the decision taken during the bedside ward round phase was subtle and it appeared to be following a weak script. However, the excerpt above indicates the likely presence of a stronger script which may be another example of the 'doctor-nurse game' (Stein, 1967; Stein *et al*., 1990).

Referring back to my analysis in Section 7.2, the main functions of the ward round were to include updating and evaluating information, creating care plans and establishing shared understanding. The different professions, who purposely moved smoothly from one stage to the next, intentionally invoking strong to weak scripts and providing a more holistic plan of care, achieved this. Another important function of this complex script, was that it gave the patient and family a voice, developing IPC further and which was not common in other encounters, except perhaps for the patient case conference MDT meetings when they included patients and families.

During the stages that the script became weaker, such as in Stage Three, there was more opportunity for IPC to be enacted through more interactive participation. Stage Three gave a space to the other professionals on the ward round to contribute their expertise and knowledge. When this happened, a more holistic care plan was developed. However, during the strongly scripted episodes, the strong script tended to reinforce hierarchy, with the consultant or doctor being at the top. Imposing hierarchy may have limited or precluded IPC during important stages of the ward round. The strongly scripted stages may have prohibited the patient and family, and other professionals, from participating intensely in all stages and thus, provided a less comprehensive and holistic care plan for the patient. On the other hand, invoking strong scripts in Stages Two and Four, encouraged efficiency within the timeframe allowed before and during the ward round.

Having analysed my observation sessions and interviews, I reached the conclusion that it makes sense that the ward round has three front-stage sections, sandwiched between opening and closing backstage phases since this allows for a more

comprehensive approach to patient review. In contrast, the MDT meetings have a fairly long backstage phase, followed by a short frontstage phase (discussed further in Section 8.3.2). These patterns affect the dynamics of each part of the two multi-level scripts.

8.3.2 Multi-disciplinary team meetings script

The MDT meetings (Section 7.3) were also described as being guided by a multi-level script. There were several functions attributed to these encounters. Their main function was to create or update care plans for patients, discharge planning, and report patients' progress. Although mostly formal in nature, these encounters were backstage until the parents and patient were invited in, which involved more participation from different professions and complemented the more formal and frontstage aspect of the ward round. Therefore, MDT meetings provide an opportunity for a wider range of professionals associated with a particular patient case to engage in synchronous IPC, since on a day-to-day basis, these professionals normally work in different areas of the hospital. These meetings provide more prompt and holistic management of the benefit of the patient and his/her family.

These meetings provide opportunities for synchronous collaboration among more than two professions, in contrast with the unscheduled weakly scripted encounters where collaboration occurs mostly between two professions. During the interviews some participants emphasised on the importance of such meetings, especially for the more complex cases where more professions are needed, compared to other more straightforward cases requiring fewer professions:

> *Cons: ... so it depends. In short-term care I don't know, someone coming in for, three days with a febrile URTI (Upper respiratory tract infection) or whatever. The collaboration there would be, perhaps, between the doctor and the nurse only.*
>
> *Int: You would not involve ...?*
>
> *Cons: It doesn't necessitate a wider ... So I believe, I strongly believe in inter-professional working but some situations necessitate it and necessitate a much wider array of professionals than other situations.(...)*[In the MDT meeting there was] *a good mix. But again, you see, depending on the nature of the case. There* [in the MDT meeting*] we had also, he/she* [the patient] *was a refugee, so*

we also had a refugee agency so depending on the case but I don't expect for on the ward, what have we got just now? Lots of little wheezers, chest infections, you don't necessitate such a wide ..., the case does not necessitate such a wide input of inter-professionals. **[Formal Interview: Consultant]**

Perhaps this consultant did not see other 'invisible' professions, such as the laboratory technicians, as part of IPC. At some point for each case, she would require laboratory results and this illustrates how some individuals perceive IPC. This may be another case of "invisible work" (Nardi & Engeström, 1999, p. 1) in IPC where some professionals work completely backstage.

Another doctor expressed his wish for MDT meetings to be held more frequently and on a more regular basis. The different levels of scriptedness that a multi-level script offer have the potential to encourage interaction as shown in this excerpt:

Doc: I mean, obviously, we have to find the time to sit down and speak together so I mean I think that the best approach is just having multi-disciplinary meetings, really I mean, on a more frequent basis and to discuss patients. OK? Or else if you have a complex patient, sort of, schedule a separate meeting for that patient. **[Formal Interview: Doctor]**

Meetings have strongly scripted phases but are predominantly guided by weakly scripted phases, which provide more opportunity for professionals to collaborate and thus provide a more holistic care-plan than for example the bedside ward round. However, participation also depends on the agency of the individual and several characteristics determine whether the individual participates or not as discussed in Section 8.3.1. I also observed other characteristics in my fieldwork which include confidence in the professional role, expertise and knowledge of the medical field and information about the case. Indeed, this was clearly highlighted by one of the doctors when referring to the need of the nurses' participation in these meetings:

Doc: [...]given their [nurses'] *working hours, obviously they get a better feel of the psychosocial aspect of the patient really, so they are in the best position, sort of, to highlight the issues. Because parents are with the children for long periods and sort of, if you don't look at children from the outside, sometimes you don't realise that there are some issues and nurses are in the best position to do that. So, it is great if they can highlight that but I would like them to be more involved to give their input in the medical aspect of things, as well.*

Int: What do you think is the reason why this happens?
Doc: Sometimes, sometimes, it is due to lack of confidence.

Int: Lack of confidence? ...
Doc: It could be due to a lack of, sort of, background information.

Int: Knowledge?
Doc: As well, and sometimes they take things for granted because they have been doing it for a number of months and they don't appreciate the rationale why they are doing some things. **[Formal Interview: Doctor]**

During the interviews, the participant nurses briefly discussed the perspective of contributing or not contributing to these meetings. The reasons they gave were that they were usually busy when these meetings took place, or they were held at inconvenient times:

Nurse: Perhaps you may [should] *come and observe the meetings that are held every month.*

Int: Who organises them?
Nurse: And then also..., emm Dr [Uses Surname], *the doctor at the Detox Centre. Anyway, it is held every month. It is not the first time that I did not attend ... sometimes when we are busy* [on the ward] *I don't attend. I didn't go for the last meeting, but I usually like to attend ... when I can I attend.*
[Formal Interview: Nurse]

Therefore, I can only speculate on the reasons for nurses' or other professions' lack of participation in the MDT meetings. Similar to the ward rounds, it may be that they have internalised the script of these meetings, especially when the multi-level script is strong, and they are not willing to challenge this script, accepting the status quo and letting the consultant and doctors dominate the meetings. Even though one doctor (Section 7.3) expressed the wish that nurses would contribute more in meetings and that nurses have more to offer, the individual's participation also depended on how willing the leading consultant/doctor was to allow this (Section 8.3.1). This could also be due to power issues and the fear of being shamed by those higher up in the hierarchy. This could be why the more senior and experienced nurses were the ones who participated more in the MDT meetings. This sometimes presented itself as a protest to those of another profession, perhaps considered as being of a higher professional status as will be discussed in Section 8.8. Professionals in this situation may be losing the opportunity to collaborate,

especially when the script becomes weaker and potentially more conducive to interaction. Different professions, in this case nurses, may also not be aware of what other professions' expectations are, implying the need for dialogue about IPC.

A determining factor that encourages participation is that of how much the leader of the group, usually the doctor, is willing to include other professionals. This is similar to what happened in the ward round. Some professionals took the opportunity presented to them and others did not. Similar to the other formal encounters, these meetings are mostly consultant-led and other professionals are aware of this dominance:

> *Doc: I think that is why they* [nurses] *just* [hold] *back. Sometimes, it is because of us as well, us the doctors that we might sometimes intimidate them or maybe make them feel that their views are not appreciated. So, it is from both ends, really.* **[Formal Interview: Doctor]**

During one encounter when the group did not agree on the decision being taken by the consultant, the other doctors were the first to challenge him and then the nurses followed the doctors. After further discussion, the consultant agreed with the rest of the group. In this next example, a child was having difficulty controlling her blood glucose and the consultant was worried about the results:

> *Cons: For goodness sake, she is in hospital … let's control the food that enters her room! Do I need to go to her room and throw all the food away?*
>
> *And he glances at me, which reminds me that he is aware that I am observing.*
> *Doc: No, that's not the way. We need to educate her. So let's get the dietician to see her.*
>
> *Another doctor reinforces this and the nurses agree with the doctors' suggestion. The consultant then calms down and decides to refer the child and family to a dietician.* **[Field notes: Observation 32]**

During this encounter, I noted that even though a tense moment had been created due to the insistence of the consultant to take control of the situation, this weakly scripted phase allowed the other professionals to also have their say, even though the consultant clearly dominated the situation. This resulted in IPC.

The level of IPC achieved in cases when not all the professions agreed with the decision taken also varied. Most of the consultants observed in these types of meetings mainly listened to all the professionals and discussed the issue further until consensus was reached. The consultant then took the final decision based on all the information shared by the other professionals.

During these MDT meetings, participants also discussed ward and patient issues that could not be discussed in front of the patients. Thus, a weak script invoked backstage, provided for an unwritten agenda to be changed, giving an opportunity to the professionals to participate; yet it was still controlled by the consultant. Some of the participants in these meetings shared in the discussion and some others held back. Therefore, the level of IPC reached during these encounters depended on how much the weak script allowed for the less outspoken professionals to participate, which can be considered as another determinant of IPC. I noted that good leaders of these meetings purposely altered the script (and agenda) and encouraged all participants to contribute, allowing for better levels of participation, as shown in the following excerpt:

> *The report from all the different professions is so positive that the meeting turns into a discharge planning one. So, the conversation now centres on how the parents are going to manage the child at home. The nursing manager recapitulates what she needs to do regarding the feeding of the child and transport home and the consultant confirms this.*
>
> *The occupational therapist encourages everyone to make an effort to support the parents, especially the father who needs to interact with the child more (and continues to further discuss cultural issues as the boy is from Syria). The meeting is coming to an end when suddenly, the nurse-in-charge asks everyone whether it would be better to bring the parents in to the meeting. Everyone agrees and she leaves to get them from the ward.* **[Field notes: Observation 23]**

IPC enacted during weakly scripted phases, complimented and at times compensated for the highly scripted phases of these meetings and other encounters.

MDT meetings are therefore occasions when the different professions come together to discuss patient related issues and where professionals provide a service or seek solutions for the patient, resulting in IPC. I observed that these were also situations when participants deliberately raised and lowered the level of scriptedness in a

particular encounter but not in a well-established pattern, such as the ward round. Thus, participants in these meetings may have invoked previous scripts to conduct these meetings. This may have helped them take complex decisions while they studied the situational information available for each case. The result is that the patient is provided with a more holistic and individualised care plan.

8.4 Clinical procedures invoking strong scripts

Strong scripts, invoked during clinical procedures and phases of other encounters have the advantage of providing a well-rehearsed repertoire of what needs to happen and also the sequence of it (Abelson, 1981). This results from the repetitive nature of events and supports the day-to-day requirements of this subculture, helping individuals to understand roles and what to expect from others' behaviour. This is an essential element especially in a clinical procedure where precision is required as shown in the lumbar puncture scenario (Section 6.2). This process helps professionals perform important, sometimes risky and time-critical, procedures smoothly and safely and without unnecessary delay. This efficiency minimises anxiety or pain for patients and their families.

The script also needs to allow actors to be practical. Since scripts are learnt and not inborn (Dusay, 1976), these can be changed according to the requirements of the situation. Therefore, each encounter in the setting of this study, which was strongly scripted, still had the potential for actors to stand back and think before they acted (Goffman, 1959). Examples of this would be when participants spoke up if they saw an error, a patient safety risk or unnecessary patient discomfort. Otherwise participants just needed to play their part as part of the 'knot' (Engeström, 2008b) of work that was underway. There were also minor routine procedures that ran smoothly through a strong script that were not hugely risky or anxiety provoking, simply sufficiently common that a strong efficient script had developed.

Nevertheless, strong scripts sometimes also encourage individuals to perpetuate the social order by having different professions passively accepting what is expected of them. Strong scripts may also exclude individuals not familiar with the script or perhaps those who are unsure of what their role is in that script. Parents, families and

new staff may be the ones who are most likely to experience exclusion, which certainly is not effective IPC. Thus, those familiar with a strong script should try to remain aware of the need to help others, who would otherwise be disempowered and excluded, to understand the script content and sequence of events. The excerpt given in Section 6.2, when the mother was asked to wait outside while the staff performed a lumbar puncture, is a good example. She was not given the opportunity to decide whether she preferred to stay with her baby or to wait outside. The strong script being followed dictated that parents wait outside and nobody challenged that assumption. Had she been given an explanation of the procedure and included in the group, she could have made an informed decision and perhaps the outcome would have been different. In this case, the mother did not protest against the decision but played a passive role and followed instructions, as usually happens when scripts are very strong.

8.5 The formal handover encounter invoking protoscripts

The protoscripts invoked during formal handovers (Section 6.3) arose from the daily, repetitive and well-rehearsed rituals of these encounters. By following a protoscript, these encounters may have ensured that all aspects of care for each patient on the ward was discussed and addressed. Formal handovers were almost always intra-professional but were important for the collation and distribution of information, advice and requests from other professions. Thus, they supported asynchronous IPC (Section 6.3). There was usually a leader in this encounter who guided and influenced who spoke and when, with the effect that participation depended heavily on the personality of the leader. On the other hand, the aspect of rigidity of the protoscript, although less than a strong script (Section 6.2), may have prevented some professionals from speaking up when needed, unless they were more experienced staff who were confident in their role and did not hesitate to interact. The report that was read during handovers was a highly scripted document in itself, always following the same pattern of documentation.

Handovers were not as complex as the ward round and MDT meetings' scripts and their main functions were for professionals to update each other about the clinical condition of all patients, ward bed-state and handing over any pending work. Thus,

handovers also helped individuals to plan and prioritise their upcoming work. For these reasons, a protoscript allows professionals to get through the list of patients efficiently, yet still leave room for interaction if needed.

Therefore, the protoscript of handovers, similar to strong scripts, acts like a checklist to ensure that the care of all patients is discussed. Another function of formal handovers is that they prepare the professionals for when they conduct the ward round or approach the patients and families. Although there is not much IPC going on during these formal handovers, these encounters inform other IPC encounters that followed, such as the ward round. This is because professionals inform themselves with knowledge to be conveyed to other professionals just before or during the ward round. This is especially important for nurses, as they are the constant profession present for the patient. Their highly scripted handover report reflects this and is comprehensive. It includes information about which other professions have visited the patient and documented their contribution towards the care plan, resulting in asynchronous collaboration (Chapter Five).

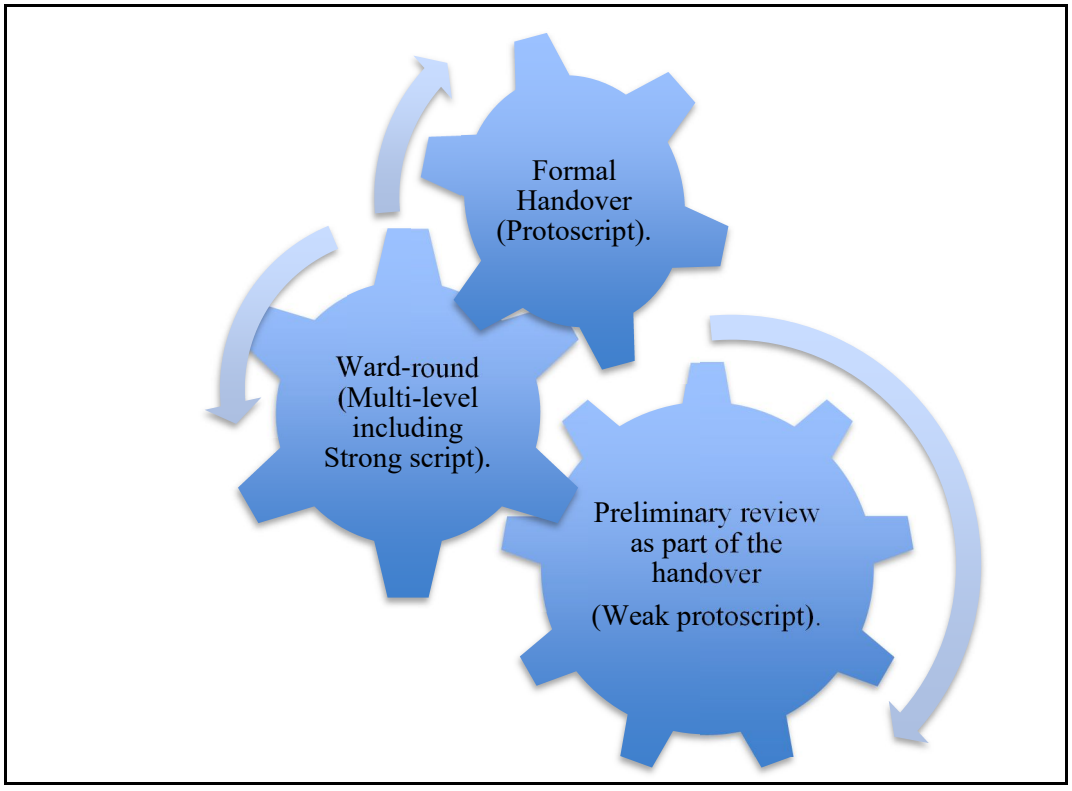
The formal handover encounters, invoking protoscripts, allow individuals to interact with the group as the need arises, adding information about the patient that is being discussed during the handover. However, I would like to stress that in this setting, formal handovers, unlike ward rounds, were intraprofessional encounters and therefore professionals may have felt more comfortable to interact in such homogeneous groups. Having said this, I see potential in trying to amalgamate the two formal handovers (that conducted by nurses and the one by doctors) and turn it into an IP handover meeting. This may involve negotiating the time when handover is given and also who leads it.

An important phase of the protoscripted handover is when the junior doctors and nurses conduct a preliminary review of the patients before the ward round commences and similar to other weakly scripted phases, this is when more interprofessional interaction ensues (Sections 6.3.1 and 6.3.2). The transition from the formal phase of the handover to the patient review is subtle and during my observations, I could not identify it as a multilevel script.

Another finding of this less protoscripted phase after the formal handover was that although it was frontstage, the less formal aspect of it involved more interaction that at times also included the patient and family. Thus, similar to my previous findings (Section 8.2), interaction is more prominent during less formal encounters encouraging more IPC.

This preliminary review of the patients, following the handover, bridges the handover protoscript and the multi-level ward round script. Potentially, it is the less protoscripted and the less formal status of the encounter that supports more IPC and thus can be the strong link between the more scripted encounters (Figure 8.2).

Figure 8.2 Weak scripts bridging stronger scripts



As argued in Section 8.2, weakly scripted encounters are similar to the oil that keeps the engine of IPC going. Thus, this bridging phase of the encounter provides an opportunity for most professions, mainly nurses and doctors, to collaborate. Apart from preparing themselves for the ward round, participants also deal with the day-to-day problems that arise, such as insertion of cannulas, in an informal way, following a weak protoscript. Therefore, at the end of the handover, when the doctors and

nurses visit the patients, the protoscript deliberately becomes weaker and allows more collaboration between the participants.

8.6 New situations that are unscripted

In the setting of this study, those encounters where participants did not have a script to follow (Section 6.5) were seen to serve two main functions. The first was that this unscripted encounter provided an opportunity to learn and develop new scripts that may be invoked in future practice, thus helping participants in subsequent encounters. This was further enhanced if the professionals involved were willing to learn from one another from those new situations. The other function of these new situations was that when different scripts were in conflict, they created a situation that was unscripted, which unless the professionals were assertive and knowledgeable enough, may have resulted in an unresolved conflict, similar to the example given from the data in Section 6.5, where the consultant expected the nurse to assist him in a procedure when the nurse was about to leave for her coffee break.

New situations without a script are opportunities for individuals to stop and try to make sense of them (Louis, 1980). This sense making of a new situation or parts of it, can then lead to developing new scripts to be invoked in future similar encounters. The example mentioned in Section 6.5, showed that what might be a new situation for one nurse, like the nurse who did not know how to react and act (Nurse 2), might be a situation that is cued by a strong script, such as in the case of the nurses (Nurse 1 and 4) who intervened. This shows that once individuals encounter a situation and start to develop scripts, it also becomes a process of learning a new skill. This incident was an occasion when IPC broke down and resulted in a lack of respect between professions. The consultant had certain expectations from the nurse being asked to assist, while the nurse was following a different script. Nurses in this setting work twelve-hour shifts and unless there is an emergency, they try to keep to the time slots allotted for coffee breaks for the smooth running of the ward. On the other hand, the consultant was in a hurry because he had other patients to see in other wards. Therefore, this may also be the result of different scripts being in conflict or competing with each other (This will be discussed in Section 8.7). Nurses, having their own script to follow to help in the day-to-day running of the ward, go for coffee

break at the given time, which may come in conflict or compete with the script of assisting the doctors in their work. Although this was an atypical situation, it was an example of how IPC can break down in this setting, and thus gives a clearer picture of what can happen within a group.

This unscripted encounter proved to be a reason for subsequent discussion between those who were mainly involved, except for the consultant. Perhaps through discussion, they were trying to make sense out of what happened:

> *Four nurses and the ward clerk are now in the treatment room discussing the incident of when the consultant was annoyed with the nurse because she did not go to assist him immediately. They claim that the consultant's behaviour was way out of line and that this should not happen again. They try to involve me as well in the conversation as I was there when it happened. I try to be as diplomatic as possible and listen to their grievances. It is as if by discussing what had happened, they were trying to justify what had happened, and find out what had gone wrong. The nurse involved in this incident had the least to say during this conversation, as if she was still trying to make sense of the situation. The other nurses were telling her that next time she should be more assertive with the consultant.* **[Field notes: Observation 17]**

The treatment room where they met, a backstage area, was used to discuss an actor who had behaved out of character (Kivisto & Pittman, 2008). By the time I had finished my observation session that day, the case had not been followed up with the consultant involved, so here they might have missed an opportunity to learn a new script on how to repair working relationships together as a team.

Such encounters could also be an occasion that perpetuate hierarchy and thus hinder collaboration. In situations where no previous script can be invoked, it seems that those with most power are most likely to gain control of the situation, leaving those with less power at a disadvantage as happened in the scenario described in Section 6.5.

8.7 Competing scripts

There were also instances when scripts of unscheduled encounters would compete with each other and would be "thrown off normal course" (Schank & Abelson, 1975, p. 153). In the subsequent interview, a nurse was talking about situations that

required initiation of IPC during escalation of care but where an error occurred and the giving information script was not completed. The doctor in this episode was following a strong script. He had just reviewed another patient and was writing down with the patient's notes and therefore focusing on the task at hand, when he was interrupted by the nurse's script with an urgent request to view a more critical patient. This is how the nurse described the event:

> *Nurse: Ok. Doctors usually communication-wise ... (...). But even with doctors there are some people who are very moody, as well and you go and tell the person ... he is very busy, you see that he is busy but the child is number one and is in distress. You see the doctor sitting in your ward and of course working on somebody's papers, another child* [he has just reviewed].
>
> *Int: Another patient.*
>
> *Nurse: Yes, and when you interrupt them to tell them that, ehm, they need to see that patient. They tell me* ***"No, don't tell me now, I am doing something else."*** [Emphatically said] ***When should I tell you? When is the right time to tell the doctor about a patient who is in distress?*** **[Formal interview: Nurse]**

The doctor was engaged in an activity and following a strong script by writing information in the patient's notes, when something new happened. The doctor's script followed this trail:

> *"I want to write up these notes before doing anything else so that the legally required record is made, nothing important is missed and so that care can progress in a timely fashion – I will try to avoid being distracted for the next few minutes."*

On the other hand, the nurse's script followed this trail:

> *"There is a distressed, probably deteriorating, patient and I must escalate care. This has to be the doctor's priority now and I must inform and persuade him, even if he does not welcome the request."*

This was when the two scripts being followed competed with each other. The doctor's intent to follow his script and finish what he was doing competed with the nurse's script that was more urgent. What was being thrown off its normal course here was that the nurse's higher priority script was expected to win over the doctor's lower priority script and so they conflicted.

Although the nurse's script did not win immediately, the doctor did get up and go to review the distressed patient. Nonetheless, the doctor might have had his own reasons why he did not get up immediately. The data set does not provide an answer to this but from knowledge of the clinical area, perhaps I can see why the doctor reacted this way. The expected outcome of both scripts did not occur immediately although the doctor reviewed the critical patient and then returned to finish his previous task. Resolving this conflict depends on the use of other script types, which might vary depending on the situation and the experience of the participants. A very serious clinical issue would warrant invoking a very strongly scripted procedure, such as calling the crash team when a child collapses. Less serious situations would probably invoke protoscripts if the participants were experienced but inexperienced staff are more likely to find they lack well-developed scripts for these circumstances and have to revert to unscripted or weakly scripted approaches to resolve the conflict.

From this episode, competition or conflict may be other reasons why scripts are "thrown off normal course" and may be added to Schank and Abelson's (1975, p. 153) typology examined in section 3.4.2.

Another example of script conflict is the episode when the nurse called pharmacy about the dosage of a drug (Section 4.5, Excerpt One). The nurse was following a script to obtain an answer and solve the problem (problem script), while the pharmacist may have been invoking another script, that of responding to requests in sequence (sequence script). This implies that when an individual invokes a script, the other HCP is expected to understand the reasoning behind that script and when this does not happen, as in the case presented, conflict occurs.

8.8 Encounters that challenge power and invoke transgression of a normal script

This section will examine two encounters that represented situations when participants transgressed within expected scripts. On studying them, they were first assigned to encounters invoking new scripts; but on closer analysis, they were

categorised as being more of a representation of a transgressed script when one profession challenged the power of another profession.

What happened in the coming excerpt was not the typical, although not rare, sequence of the scripted ward round but showed the degree of participation in the situation by the nurse and how this may have influenced the development of a script:

> *We move to the next patient and it is now the nurse-in-charge who updates the consultant about the patient. She reports what was discussed during a previous case-conference meeting where this consultant was not present. The doctor then continues with the update. The consultant examines the child while the doctor continues to update him and another doctor writes down in the patient's notes.* **[Field notes: Observation 37]**

The nurse did not follow the usual script, as it is usually the accompanying doctor who briefs the consultant before the ward round began. But in this case, the nurse had attended a case-conference meeting held earlier by other specialist consultants and therefore had very important knowledge to share about the patient. During this episode, the participants were relatively close to the patient's bedside with the nurse-in-charge forming part of the circle gathered to discuss the patient. The nurse in this episode moved to the front and spoke first before the doctor could speak, challenging hierarchy by transgressing within an anticipated normal script. The nurse was also making a statement that she could also contribute to the ward round and therefore be a partner in IPC.

The following episode is another example of when one profession challenged the hierarchy in front of other professions:

> *The doctor examines the child and asks the mother some questions and the child is also included. The nurse sits down in the background with ward-round-book in hand. When the doctor finishes examining the child, she comes over to the nurse and dictates the findings. The nurse writes down the new treatment and plan in the ward-round-book, which she later conveys to the nurse looking after the child.* **[Field notes: Observation 28]**

Everyone knew that the nurse-in-charge was sitting down and the doctor had to walk across to give her the notes. The nurse was making a big statement by challenging

the doctors. She did this by placing herself at the periphery of the group and sitting down, signalling her disapproval of what was happening.

At first I assumed that she did not want to interact with the group, but on further analysis I found that she wanted to make a statement by breaking the normal rules. By sitting down during the ward round, the nurse seemed to be protesting that the doctors were taking too long to conduct the ward round. When interviewing her, I asked about this behaviour and if she felt that somehow by participating minimally she could be missing out on the opportunity for IPC and she said:

> *It is an opportunity, however, the ward round in here is sometimes not quite structured. I see the doctors fidgeting around. I want it more to be structured. For example, when the consultant is here, it is more structured. However, when only the doctors are here, I see for example, they stop they do other things. I want the ward round to start and finish at one go. Not we start this patient, then we go and see his results, then we do other things … It is not structured properly, I think. I have been working* [to improve] *on that but it is very difficult.*
> **[Formal Interview: Nurse]**

This showed that the nurse had her own reasons for behaving as she did. She noted that ward rounds were at times dysfunctional and unnecessarily time-consuming. Indeed, when I observed her during other ward rounds with a consultant present, this nurse was more involved and stood at the front of the ward round and participated in the decisions being taken. This implies that the degree of involvement and collaboration may also depend on who is participating in the ward round besides personal characteristics and this has an influence on which script to invoke. This phenomenon of increased participation when certain consultants were leading ward rounds was also noted in other wards.

In the examples above, the two nurses were working from a position of power and the need to take a message forward. They were both senior nurses in a managerial position and their action transgressed the normal script for such an encounter. In both cases their behaviour influenced the level of IPC that happened subsequently.

This leads to the issue of where the nurse is positioned physically during the ward round, how confident s/he is in her/his knowledge of the patient and the willingness

to participate may also influence how involved an individual becomes. This positioning of individuals and their degree of participation was observed in other ward rounds. They were not necessarily only senior nurses who positioned themselves to the front of the group, but from observation, it was the ones who were more knowledgeable and confident in their work.

8.9 Conclusion

This chapter examined the scripts that different IPC encounters invoked, their outcomes, and the type of collaboration achieved. Each script had its function and achieved different kinds of IPC. The most frequently observed encounters were the day-to-day unscheduled encounters guided by weak scripts (Section 8.2). They helped to process most of the day-to-day work. These on-going backstage fluid interactions were the oil that kept the engine of IPC going. Although these encounters were the vital oil for this setting they were not sufficient and needed to be sustained by other encounters guided by stronger scripts.

Occasionally, weakly scripted encounters were found to serve as a vehicle to repair or reverse things that may have gone wrong. Despite the advantages of weak scripts, they did not always function well. This is because they lacked structure and usually occurred during very busy time frames and in busy places.

Another daily experienced encounter was that of the complex multi-level scripted ward round. Although the formal frontstage aspect resulted in the ward round being dominated by the consultants and doctors, when the script became weaker different professions, mainly nurses and the patient and family were given the space to interact and collaborate, making it a more inclusive encounter. The strongly scripted stages acted as a safety net so things were not missed, while the less scripted stages served to discuss any further issues (Section 8.3.1).

Conversely, MDT meetings (Section 8.3.2) were also described as being guided by a multi-level script where participants deliberately raised and lowered the level of scriptedness but not in a well-established pattern, such as the ward round. This backstage encounter involved more participation from different professions and

complemented the more formal and frontstage aspect of the ward round. This was the context for synchronous collaboration among more than two professions.

Performing clinical procedures was another encounter that invoked strong scripts. These strong scripts had the advantage of providing a well-rehearsed account of what needed to happen and also the sequence of how it happened.

Strong scripts therefore help individuals to understand roles and what to expect in others' behaviour. Strong scripts may also encourage individuals to perpetuate the social order when they do not challenge other profession's behaviour. They can also exclude others who are not familiar with the script invoked (Section 8.4).

Protoscripts invoked during formal handovers were also daily experienced encounters that became repetitive and well-rehearsed routines (Section 8.5). By invoking a protoscript, participants ensured that all aspects of care for each patient on the ward was discussed and addressed. The protoscript of handovers, similar to strong scripts, acted like a checklist. Formal handovers, unlike ward rounds, were intraprofessional encounters and therefore professionals may have felt more comfortable to interact in such homogeneous groups, even though participation depended heavily on the personality of the leader. The less protoscripted phase after the formal handover when nurses and doctors reviewed the patients, involved more interaction that usually included the patient and family. This less protoscripted and less formal status of the encounter that supported more IPC could be the strong link between the more scripted phases.

The least observed unscripted encounter provided an opportunity to learn and develop new scripts that may be invoked in future practice (Section 8.6). These unscripted encounters usually happened when different scripts were in conflict. If the professionals are assertive and knowledgeable enough, new situations are opportunities for individuals to stop and try to make sense of what has happened. On the other hand, if not analysed, they can result in an unresolved conflict and participants would miss an opportunity to learn a new script on how to repair working relationships together as a team. Unscripted situations are also occasions which potentially perpetuate hierarchy and thus hinder collaboration because those

with most power are most likely to gain control of the situation, leaving those with less power at a disadvantage. There are also instances when scripts can be in conflict or compete with each other (Section 8.7).

Another scripted encounter examined in this chapter was when participants transgressed within expected scripts (Section 8.8). Transgression of a script occurred when one profession challenged the power of another profession by not following an expected script. This is a means of making a statement by breaking normal rules and challenging the doctors. In the two examples given, both nurses were working from a position of power and the need to take a message forward. In both cases, their behaviour influenced the level of IPC that happened subsequently.

8.10 Summary of the five findings chapters

In this paediatric setting, interprofessional collaboration (IPC) was enacted through the processes of different acts to exchange information. Data showed that there were four constituent acts of information exchange and these were namely asking for information and associated responses; giving of information proactively; transferring of work and escalation of care; and two-way negotiation (Chapter Four). These acts looked simple when first examined, but on closer analyses they were found to be more complex and calculated acts than expected. IPC in this setting was achieved synchronously in face-to-face and telephone encounters (Chapter Four), and asynchronously through written documents and electronic images (Chapter Five). The interplay between synchronous and asynchronous IPC will be discussed in Section 9.5.

Encounters in this setting included short unscheduled events where professionals met to interact to progress the day-to-day work of the ward. The four constituent acts of IPC were observed during all kinds of encounters; however, one of the key findings showed these acts were more evident during the weakly scripted day-to-day unscheduled encounters. These encounters were predominantly held near the nurses' station (NS) or in the corridors, similar to findings by other researchers (Lewin & Reeves, 2011; Pill, 1967). Although being more public in nature and therefore more susceptible to distractions and interruptions, these unscheduled encounters were the

'oil' (Figure 8.1) that progressed the day-to-day work. Due to their unstructured and unscheduled nature, HCPs may not appreciate the significance of how work is progressed in these day-to-day short encounters. Another finding was the notion that weaker scripts were better at enacting certain types of IPC, namely during 'knotworking' (Engeström, 2008b), when repairing collaborations, and when the encounter required more reflection. These will be discussed in Section 9.2.

The theoretical lens of scripts (Goffman, 1959) (Section 3.4.2) and the spectrum of scriptedness (Gioia & Poole, 1984) (Chapter Six) were used to gain a deeper understanding of how IPC was initiated and sustained, or repaired after breakdown. This lens was chosen because scripts help to better understand the behaviour of individuals and help to progress the day-to-day work in organisations, encouraging expected responses, especially in negotiating encounters (Vanclay & Enticott, 2011).

The spectrum of scriptedness ranged from the unscripted episodes which were rare, to the strongly scripted. The frequently experienced weakly scripted and the protoscripted fell in between these two (Figure 6.1). There were also more complex encounters, such as the ward rounds and MDT meetings, which utilised a spectrum of scripts creating a multi-level script (for an example see Figure 7.1). The scriptedness of enacting IPC and the usefulness of analysing the findings through scripts are discussed in Sections 9.6 and 9.7.

The encounters where IPC was mostly observed included planned events, such as the ward rounds, multidisciplinary team (MDT) meetings and formal handovers. Ward rounds and MDT meetings (Sections 7.2, 7.3 and 8.3) intentionally invoked multi-level scripts of strong and weak categories to provide a holistic care plan. Both categories of scripts are important because while the structure of the strongly scripted phases ensures that nothing is missed, the weakly scripted phases allow other professionals, besides the doctors, to participate in the care plan. In effect, weakly scripted phases are empowering, or at least flattened the power hierarchy for a while. Weak scripts, especially those invoked in the fifth stage of the ward round (Section 7.2.6), also provide opportunities for participants to repair or reverse decisions taken during the more rigidly scripted stages (Section 8.3.1, Excerpt Two).

Multi-level scripts and how these developed into metascripts is discussed in Section 9.4. Other planned encounters include the protoscripted formal handovers where the less protoscripted phase after the formal handover is when nurses and doctors reviewed the patients. This is the phase where more IPC happens (Sections 6.3 and 8.5).

Other encounters where IPC was observed were the strongly scripted encounters, such as during conducting clinical procedures (Section 6.2 and 8.4), which were found to be better at generating certain types of IPC. Strong scripts were invoked when a well-rehearsed sequence of events needed to be enacted. Strong scripts also help individuals to understand roles and what to expect in others' behaviour. Therefore, strong scripts are mainly invoked during encounters such as clinical procedures requiring clinical precision. These are discussed further in Section 9.3.

Professionals were also occasionally caught unexpectedly in new situations (Sections 6.5 and 8.6). Although I initially assumed that a lack of script was rather ineffectual in producing IPC, on further analysis, I realised that such situations could be used to learn new scripts that may be invoked in the future enactment of IPC. Creating new scripts was further enhanced if the professionals involved were willing to learn from each other in those new situations. New scripts are also created when different scripts are in conflict (Section 6.5, Excerpt One), which unless the professionals are assertive and knowledgeable enough to learn from the unexpected new situation and move forward, may result in unresolved conflict. There were also occasions when professionals, mainly nurses, challenged hierarchy by transgressing within an anticipated normal script (Section 8.8). These professionals were usually in a position of power and felt the need to take a message forward. On first examining examples where this occurred, I first assigned them to encounters invoking new scripts; but on closer analysis, they were categorised as being more of a representation of a transgressed script, when one profession challenged the power of another profession. In both examples given in Section 8.8, the nurses' behaviour influenced the level of IPC that happened subsequently

Chapter 9 Discussion

9.1 Introduction

As outlined in previous chapters, interprofessional collaboration (IPC) in the clinical area is defined as the process by which members of different professions come together to solve patient problems or provide a service to the patient (Reeves *et al*., 2010). Several positive outcomes of IPC have been identified and these include quality care and patient safety (Canadian Health Services Research Foundation, 2007; Zimmerman & Dabelko, 2007). The more complex the patient case is, the more professional groups need to come together and collaborate to provide a holistic care plan. The importance of effective communication cannot be underestimated. Indeed, "Quality care depends on effective communication across disciplines" (Carthey, 2008, p. 18).

This ethnographic study examined how IPC was enacted by healthcare providers (HCPs) caring for hospitalised children in a moderately-sized paediatric setting, comprising of four wards, namely two medical, one surgical and one oncology unit. Findings showed that IPC depends on information exchange and that we are able to understand more about information exchange in various ways, as presented in the findings Chapters Four to Eight.

The study considered various types of interactions and information exchange and determined that IPC is mainly achieved through face-to-face synchronous interactions (Chapter Four) and also through asynchronous acts (Chapter Five). The findings show that main components for effective IPC are generally as follows:

- asking for information and associated responses;
- giving of information proactively;
- transferring of work and escalation of care;
- two-way negotiation.

These components, enacted during several types of IPC encounters, were analysed through the lens of Goffman's (1959) scripts. A script is an appropriate sequence of events in a certain context stored in our memory, which may be invoked during future encounters. Findings showed that different IPC encounters fell on a spectrum of scriptedness, from unscripted interactions to strongly-scripted interactions (Figure 6.1), and that some encounters also had a multi-level script (Chapter Seven). Interview transcripts and observation field notes revealed that a range of different categories of scriptedness was invoked by HCPs as they sought to enact IPC.

Looking at IPC through the lens of scriptedness is a novel approach. To the best of my knowledge, having reviewed the literature on scripts (Section 3.4.2), this is the first time that attention to scriptedness has been applied to IPC. The following discussion centres on how looking through the lens of scripts has increased knowledge on how IPC is enacted. It begins by discussing how weaker scripts are key to promoting and sustaining IPC, because weak scripts require active thinking about what happens next in an interaction. This is termed "controlled script processing" (Gioia & Poole, 1984, p. 449) as outlined in Section 3.4.2.

Consequently, weaker scripts support discussion, active listening, reflection and the repair of collaborations which have stalled or gone wrong (Section 9.2). In contrast, stronger scripts or "automatic script processing" (Gioia & Poole, 1984, p. 449) offer the speed and efficiency of pattern-matching and well-rehearsed ways of navigating frequently occurring interactions which differ at the level of detailed content, rather than at the level of purpose within the transaction of day-to-day work and IPC (Section 9.3). In Section 9.4, I will discuss complex IPC interactions, which have a guiding metascript of weakly-scripted phases and strongly-scripted phases, each phase contributing a valuable component to the larger IPC interaction.

This ethnography collected data on synchronous and asynchronous IPC in the study setting. Judging from the results of my literature search, asynchronous IPC is rarely analysed in the literature. This is surprising since through this study, I have found it to be ubiquitous and an essential support for synchronous IPC. The interplay between synchronous and asynchronous IPC, which together support the delivery of safe, effective, timely, holistic, patient-centred care, is discussed in Section 9.5.

In the next sections, I also discuss the scriptedness of enacting IPC and the usefulness of analysing IPC through the lens of scripts (Sections 9.6 and 9.7); I reflect upon my status as a practitioner researcher (Section 9.8); discuss the trustworthiness of this study using Guba's (1985) criteria of credibility, transferability, dependability and, confirmability (Section 9.9); consider the strengths and limitations of this study (Section 9.10) as well as make recommendations for management and practice, education and future research (Section 9.11). Final conclusions can be found in Section Chapter 10.

9.2 Weaker scripts and IPC

My data showed that the quality and depth of the IPC observed was different during weakly scripted encounters, such as the unscheduled day-to-day interactions and weakly scripted phases of interprofessional meetings; when compared to the strongly scripted interprofessional encounters, such as certain phases of ward rounds and MDT meetings. One of the key findings of this study was that weaker scripts were better at facilitating certain kinds of IPC. The kinds of collaboration that were associated with weak scripts were when reflection is needed, and when repair of a broken or stalled collaboration is needed. It will be noted that repair mostly occurs during backstage IPC encounters. The use of backstage spaces for reflection was also observed and is discussed in Section 9.2.3.

Weak scripts are stored memories of past experiences that although experienced frequently, still need active processing and reflection to recall, adapt and apply to similar situations. They are considered weak because despite individuals generally knowing the format of what is going to happen in a situation, it allows time for reflection and sometimes also discussion on what is coming next. Weak scripts are invoked mainly during the day-to-day unscheduled encounters, considered in Sections 6.4 and 8.2 but also during weakly scripted phases of multi-level scripts (Chapter seven) such as ward rounds (Sections 7.2.2, 7.2.4 and 7.2.6) and MDT meetings (Section 7.3).

As evidenced by data analysed in Sections 6.4 and 8.2, day-to-day unscheduled interprofessional encounters generate the type of IPC that 'oils' the achievement of

work related to patient care and also the running of the ward. Here I reiterate that literature pertaining to these informal interactions is scarce even though "less visible informal front and backstage activities appear to play a more important role in maintaining interprofessional communication." (Lewin & Reeves, 2011, p. 1601). Indeed, "chance or impromptu encounters" have been given less attention and need further examination (Becker, 2007, p. 46). Somehow, because these interactions are low-key yet vital, they get overlooked in studies of IPC, which might be because researchers are drawn to the exotic or high-profile aspects of collaboration in workplaces (Atkinson & Pugsley, 2005). This is why this study was also concerned with the mundane acts of how IPC was enacted in the day-to-day encounters.

These encounters predominantly occurred between groups of two and sometimes more professionals, mainly doctors (excluding consultants) and nurses. Doctors, especially junior ones, and nurses were the ones making up these dyads, echoing findings by Patel, Cytryn, Shortliffe and Safran (2000) who studied collaboration in a primary care unit and Reeves and Lewin (2004) who studied IPC in adult medical wards. The main reason why interaction generally happens between these two professions is that doctors below the grade of consultant and nurses are the two most constantly present professions on the wards and are also more numerous than other professions, such as the physiotherapists and play teachers. However, it was noted that other professions, particularly physiotherapists also join or initiate these unplanned IPC interactions (Section 5.2.1, Excerpt One).

These encounters may be more successful at generating IPC as they are generally face-to face. This observation is supported by the fact that during formal interviews, two different professionals expressed their preference to face-to-face interaction. In Section 4.4, Excerpt Two, the doctor asks for the nurses' presence in the ward round so that they know exactly what is happening first-hand and together, they tackle the problems there and then. In Section 8.3.2, Excerpt Seven, when all professionals collaborate synchronously during the MDT meetings, decisions were taken collectively.

IPC may also be enhanced through various kinds of interactions. King, Bravington, Brooks, Melvin, and Wilde (2017, p. 7) assert that:

> … interaction between professionals is not just a matter of exchanging information needed to get the job done. Rather, it is often also about developing and maintaining relationships that will enable the parties to work together well over the long-term.

This also includes the relationships developed through interactions involving phone calls and forms of asynchronous collaboration that also play a crucial part in IPC. Asynchronous IPC is discussed further in Section 9.5.

9.2.1 Weak scripts that evoke reflection

When invoking weak scripts during interactions, participants are loosely guided by previous experience but, at the same time, they appear to be thinking critically in action about their interaction with the other participants. It is as if a weak script is triggered by the initiation of the interaction but the thoughts and actions that follow require more reflection that changes and creates a new script to be invoked in future practice. This usually happens when a complex patient problem needs to be solved or when a patient's condition becomes critical. The more complex the case, the weaker the script becomes and the more HCPs need to engage in critical reflection.

The notion of complex cases, requiring more critical reflection was stated by Mamede and Schmidt (2004) when studying reflective practice and its relation to expertise in medicine, and Mamede, Schmidt and Penaforte (2008) when they were studying doctors' accuracy of diagnoses. Their research resonates with literature on reflective practice which has its roots in Dewey's (1910) work on investigating experience, interaction and reflection, and Schön's (1984, ps. 28, 68.) work on "reflection-in-action." Reflective practice is perceived as the ability of professionals "to think critically about their own reasoning and decisions" (Mamede *et al.,* 2008, p. 468) especially when more complex and uncommon issues arise. This is where reflection-in-action, guided by weak scripts come into play (Norman, 2005). The more complex the task at hand, the more controlled thought processing is needed, requiring more reflection and discussion; possibly making participants more open to collaboration. Reflection-in-action entails reflecting on the present issue with a chance of influencing the action being taken. As such, reflection-in-action is useful for professionals who need to respond to an issue at the time it happens (Gaynor, 1983) as in the case of HCPs during their day-to-day work. Rather than depending

on automated strong scripts, HCPs invoke weak scripts according to what they think works best at that particular time. During such an encounter, "we can still make a difference to the situation at hand – our thinking serves to reshape what we are doing while we are doing it" (Schön, 1987, p. 26).

The empirical study by Mamede and Schmidt (2004, p. 1304) suggests that one of the reasoning processes set off when a complex case presents itself is, "to critically review one's own assumptions or beliefs regarding a problem (meta-reasoning)." I observed that by critically considering their own assumptions, professionals may be more willing to listen to others' contributions towards IPC and address the problem at hand (Section 6.4 Excerpt One). Consequently, a patient's case would be investigated in a more comprehensive manner, allowing each profession to contribute towards the patient's care by applying their knowledge and expertise, thus enacting IPC.

On the other hand, as Mamede and colleagues (2008, p. 469) found, with simpler, more common day-to-day patient problems, professionals, especially doctors, were more inclined to invoke strong scripts and use "matching patterns" for rapid diagnosis and problem-solving. Doctors tended to do this especially when they were more experienced (Pelaccia, Tardif, Triby, & Charlin, 2011). Matched patterns are similar to the automatic strong scripts and are an efficient way to deal with routine situations (Charlin *et al*., 2000; Thackray & Roberts, 2017). Although these may be desired in certain situations and are essential in others, my data showed that strong scripts tend to reinforce previously learnt behaviour, not leaving much opportunity for reflection, which potentially may exclude other professionals and therefore reduce IPC (for further discussion see Section 9.3).

Other authors have taken reflection-in-action further and contend that the action itself also needs to happen with reflection (Freire, 1993; Vella, 2008). *Praxis*, a Greek word meaning action with reflection, makes new content of a weakly scripted act more relevant to the present situation by recreating that content (Vella, 2008) and developing new scripts.

Freire (1993) defines *praxis* as 'action-reflection-transformative action.' However, this is not to be followed as a sequence but in a rather dialectical nature (Allman, 1999). Therefore, the professional who stops to reflect needs to be ready to engage in this hesitation and be open to others' contribution to enact collaboration. Doctors, who reflect on their patients' cases provide a better patient service (Mamede & Schmidt, 2004).

Praxis can be used by HCPs when collaborating and reflecting on the action needed when a complex or unique situation arises (Such as the example given in Section 6.4, Excerpt One). Without *praxis,* new learning is like collections of information that do not result in created knowing because … "*praxis* turns action into thought and back again" (Vella, 2008, p. 233). Therefore, weaker scripts support the important process of *praxis*/reflection, which is necessary to convert individual experiences into more widely applicable learning.

Having discussed the importance of invoking scripts and how they influence and guide behaviour, invoking scripts is not enough. These scripts need to be reflected on and in so doing, create and internalise new scripts to be invoked in future practice. That is why weak scripts are better for certain types of IPC as they allow more reflection that has the potential to include other HCPs. When a HCP purposely stops to reflect on an action (*praxis*), this gives time to other individuals to start thinking critically and asking questions about the action being taken. Similarly, the more professionals reflect on their invoked scripts and the actions that follow, the better the collaboration and patient care (See example in Section 4.4.2, Quotation Two).

Garrison (1991) says that reflective practice, as with critical thinking, can be taught, which implies that all professions need to include reflective practice in their curricula. However, "Better understanding of the thinking process is considered crucial for making it teachable" (Mamede & Schmidt, 2004, p. 1307) and further research on the effect of such programmes and their long-term effect on practice is needed.

Usually, the more experienced and knowledgeable a HCP is, the bigger repertoire of weak and strong scripts is collected, provided that individuals convert experience

into learning and that workplaces afford many opportunities for people to learn. Therefore, experienced HCPs are more likely to draw on learnt scripts and reflect upon them than a less experienced HCP. This is why an encounter that invokes both weak and strong scripts, such as the ward round, may act as a vehicle to teach less experienced HCPs, as it gives them the opportunity to learn from other more experienced HCPs as they deliberately invoke different scripts. Abelson (1975) states that scripts may develop as a result of routinely experienced events or by viewing such activities.

Invoking strong scripts has its own benefits and will be discussed further in Section 9.3, but weak scripts, with their tendency to make the individual stop and reflect on the issue at hand has the potential to encourage less experienced HCPs to interact, thus enacting IPC. Moreover, "reflection-in-action affects action that will take place in the future" (Hébert, 2015, p. 366) by creating new scripts to be invoked in future practice.

9.2.2 Repair of collaborations

Although a substantial amount of literature talks about the processes, benefits and outcomes of IPC and examines concepts that indicate IPC and the challenges it provokes (Chapter Two), it pays little attention to how and when a broken collaboration can be repaired. Poor collaboration may cause interruption of service, fragmentation of care and friction in work relationships (Easen *et al.,* 2000; Solomon, 2010) and literature proposes that improved IPC is the answer, often making general recommendations about improving teamwork and communication, and supporting interprofessional education and learning especially in improving patient safety (Francis, 2013; Reeves, Clark, Lawton, Ream, & Ross, 2017; Zwarenstein *et al*., 2009). It would be useful to have more research attention which focuses on what works and how people can be helped to learn and implement the repair of broken collaborations. The following discussion aims to do that.

In this study, observation of unplanned day-to-day weakly scripted encounters, demonstrated that HCPs invoke weak scripts when attempting to repair a disrupted or broken collaboration: these are conversations for which the steps to resolution cannot be predicted in advance and each step requires controlled script processing

(Gioia & Poole, 1984). Furthermore, during encounters with multi-level scripts, such as the ward round and MDT meetings, the weakly-scripted phases were when non-medical staff (and sometimes the patient or family) were able to address facets of decision-making that needed correction or completion as in the example when the nurse suggested that the parents and child should be invited to join the MDT meeting (Section 7.3.1).

When a collaborative endeavour breaks down, such as may happen during the ward rounds when different professionals join and leave the group to continue with other work, HCPs usually pick up and repair the previous collaboration during the weaker phases of the ward round or, more commonly, through the weakly scripted encounters that follow. These weakly scripted encounters usually happen face-to-face, but also by telephone as in the example given in Section 4.5 (Excerpt Four). The nurse in this example restarted and repaired the collaboration with the pharmacist by calling the pharmacy. She then also restarted the collaboration she had paused with the doctors to finalise the treatment being prescribed.

Unscheduled weakly scripted encounters, normally backstage, were the 'oil' that maintained and when necessary restarted the flow of IPC. The attentive controlled processing of the weakly scripted encounter was better suited to this task than the more automatic script processing in a strongly scripted encounter (Sections 6.2 and 6.4). Observations revealed that lower status professions initiated or joined unscheduled backstage encounters to address the needs of their patients or the ward team, and when necessary, to repair IPC scripts that had been blown off course (Section 8.3.1, Excerpt Two). Moreover, the weakly scripted negotiations that occurred backstage were opportunities to support the transitioning from professional groups working in parallel to more integrated interprofessional work. This is similar to Ellingson (2003, p. 110), who, echoing Opie's (1997) work found that:

> Despite considerable constraints related to the crowded and hectic environment of the backstage, backstage communication moved the team from a multidisciplinary mode (acting in parallel, keeping each other informed) towards an interdisciplinary or transdisciplinary mode...

Similarly, Lewin and Reeves (2011, p. 1601) found that backstage work "was used mainly to overcome limitations of planned frontstage work." The authors also assert that informal interactions were more conducive in sustaining interprofessional communication. Using the lens of scripts in my study deepens understanding of the mechanisms of what has been observed by some studies, but not previously explained.

Weakly scripted interprofessional encounters require controlled processing throughout the interaction, which naturally supports more attentive listening in parallel with attention to non-verbal responses. In turn, this should encourage more considered responses and mutual respect and increase the likelihood of some adjustment of one's initial perceptions and plans. Arguably, these are conditions conducive to some lessening of hierarchy and conducive to negotiation and joint problem solving. Experienced HCPs in this study, and those of Ellingson (2005) and Lewin and Reeves (2011), have developed an embodied understanding of how to repair faulty IPC by invoking weak scripts at certain times and in certain spaces. Most often these were unscheduled encounters in the workplace, often backstage (Section 2.3.1). HCPs also made use of weakly scripted phases in ward rounds and MDT meetings (Sections 7.2 and 7.3). A deeper understanding of the 'How?' 'When?' and 'Where?' of progressing and repairing IPC could help HCPs to improve IPC in their workplaces and to mentor novice or struggling colleagues. This is discussed further in Sections 9.8 and 9.11.2.

Literature shows that IPC is not always easy to achieve (Easen *et al*., 2000; Reeves *et al*., 2010; Robbins, 1990; Solomon, 2010). There are certain challenges that block its success or break collaborations, for example not understanding and respecting the different professions' roles and responsibilities (Soklaridis, Oandasan, & Kimpton, 2007; Tsasis *et al*., 2012; Wilson, Moores, Lyons, Cave, & Donoff, 2005). Wilson and colleagues continue that although most HCPs view IPC positively, there is still much education around interprofessional team building left to be done.

Through enacting IPC in weakly scripted encounters, this barrier can be surpassed. The less formal, more open interaction that I observed during unscheduled weakly-scripted encounters created a state of mutual respect and acted as an opportunity for

professionals to get to know each other better and learn more about each other's work and area of expertise. Overall, these professionals had good working relationships and gave adequate (albeit limited) time to listening to each other and responding constructively. For example in the MDT meetings (Section 7.3), although doctors usually had a set agenda, led the meeting and had to manage time carefully, they also encouraged and expected the other professionals to contribute their expertise (Section 4.4, Excerpt Two and Section 8.3.2, Quotation Three).

Although various professions had different foci, they collaborated and developed a more holistic plan of care for the patient. This resonates with the notion that working with other professions who have different roles "involves dialogue between multiple perspectives and parties without implying or seeking homogeneity" (Akkerman & Bakker, 2011, p. 19).

Steihaug and colleagues (2016) highlight time pressure as an obstacle to IPC and potential cause of IPC breaking down. Time pressure is evident in my study too, particularly for IPC enacted during the ward rounds and MDT meetings. These formal IPC encounters were not only time restricted but also demanded clinical acumen and good communication to support the gathering and interpretation of information from diverse sources to enable diagnosis, decision-making and updating of plans. The impact of time pressure on these processes was managed through invoking metascripts (which have alternating weakly scripted and strongly scripted phases and will be discussed in Section 9.4). Time pressure was also managed by augmenting the formal IPC events with less formal, opportunistic and weakly scripted IPC encounters as the need arose. Professionals would catch up with each other near the NS or when passing each other in the corridor; similar to the opportunistic encounters described by Lewin and Reeves (2011). Thus the unscheduled interactions which (somewhat counter-intuitively) predictably occur, and usually only take a few minutes to conduct, compensate for what is lacking in time-pressured planned encounters.

Challenges to IPC caused by hierarchical and power issues that surfaced from time to time were also overcome during weakly scripted encounters. During these encounters or phases of multi-level encounters, professionals were more at par with

each other than during strongly scripted events or phases, which were mainly dominated by the doctors. Nugus and colleagues (2010, p. 899) discern how clinicians exercise power and distinguish between "competitive power" and "collaborative power.' Thus, power can have a positive connotation and manifest as being collaborative, productive and cooperative. Both collaborative and competitive power were observed in this study. In Chapter 8 there were two examples of senior nurses exercising power and agency by deviating from the normal ward round script.

In the first example (Section 8.8, Excerpt One), the nurse accompanying the ward round deviated from the normal script of the ward round (in which junior doctors speak before nurses) and was the first to provide the consultant with information about the patient. Having attended an earlier meeting supported her power and agency and possessing certain knowledge about the patient, which the other HCPs attending the ward round, did not have. This influenced decision-making, the patient care-plan and evaluation of care. Speaking first, before the junior doctor, was assertive and avoided having to correct false assumptions that might have caused the group to take an erroneous direction from which they would need to backtrack. The nurse's prompt interjection was an example of exercising collaborative power. She used this productively at the beginning of the weakly scripted Stage One and Three of the ward round, when HCPs know that they can interact and share important information that will be considered in updating diagnoses and plans. Had she approached this differently and exercised competitive power, the IPC may not have run so smoothly. Moreover, not sharing such information may have had serious effects on patient outcome.

Competitive power and collaborative power can coexist in the same area because during interactions "actors can exercise agency, or resist power structures" (Nugus *et al.*, 2010, p. 907). Resisting medical dominance often implies conflict (Lewis, Heard, Robinson, White, & Poulos, 2008). In the second example in Section 8.8 (Excerpt Two) the nurse deviated from the normal ward round script by sitting down away from the group to protest against the disorganised manner in which doctors in training were conducting the ward round. She was resisting power structures and only engaged in the ward round when the doctor approached her in the weakly scripted Stage Three. The amount of IPC that ensued from this encounter was less

than in the previous example, yet the hierarchy of professions (also competitive power) made it difficult for the nurse to address the ineffective conduct of the ward round more directly. Competitive power may result in one profession dominating another and hindering IPC. The impact of hierarchy is a longstanding problem in healthcare. Wanzer, Wojtaszczyk, and Kelly (2009), who analysed nurses' perceptions of physician communication practices, nurse–physician collaboration and nurses' job satisfaction in a paediatric hospital in the USA, found that nurses often felt their contributions were not appreciated and although they held important information, they were often left out of decision-making.

9.2.3 Backstage Spaces

Space and location have an influence on all encounters, including the day-to-day unscheduled IPC encounters which were normally conducted backstage, generally near the nurses' station (NS), but also in corridors and examination/treatment rooms. The NS, with its perceived barrier of the desk, operates mainly as a backstage space but becomes frontstage when patients, family or visitors approach. The same phenomenon occurs with encounters in corridors. Examination/treatment rooms are selected as backstage spaces for difficult or sensitive conversations, when not required for their primary purposes. Staff rooms, although backstage spaces, were not included in this study as they were mainly used by nurses and nursing assistants and very rarely by other professions.

The NS, although originally planned for nurses to observe patients more closely (Brown, 2009; Gum, Prideaux, Sweet, & Greenhill, 2012), was used in this setting as a hub for activities by all HCPs, such as record keeping, accessing the computer, and communicating with other staff. This was consistent with findings by Chiang (2010) and Zborowsky, Bunker-Hellmich, Morelli, and O'Neill (2010). The wards in this study's setting had compact NSs. This required the different professionals to work in close proximity and thus provided the conditions in which interprofessional conversations could begin. Most of these interprofessional conversations were weakly scripted and work-focused, generating IPC. Consistent with Gum and colleagues (2012), my analysis showed that this was also the space where social banter occurred between all levels of professional status: the NS environment reduced the impact of hierarchy. The close proximity of people and the fact that

professions other than nurses and ward clerks are technically visitors in the NS space (its name should act as a constant reminder) may make it easier for individuals to exchange information and conduct social conversations. These activities progress the work of the team and strengthen interpersonal relationships.

The backstage context was studied by Gum and colleagues (2012), who observed how NS design in three rural hospitals in South Australia can help IPC. They used Bourdieu's (1989) theory of social space to study activities in the NS, arguing, "the nurses' station has become a permanent and social position within a hospital as it seeks to assemble and unify a group who work closely together in a social space." (2012, p. 22). Therefore, if this space helps the group to be less hierarchical and encourages IPC, then more attention needs to be given to this workspace. There may be an argument for changing its name from NS to one that is more inclusive, such as 'central hub.'

Becker (2007, p. 56) considers these backstage spaces as "neutral zones" because any profession does not own them. Neutral zones may help to break down the more traditional barriers built by hierarchy (Becker, 2007; Iedema, Long, Carroll, Stenglin, & Braithwaite, 2006) and thus encourage IPC because this flexible and less formal context has the potential to encourage more interaction between professionals of different status, including that related to patient care and the organization of work. Furthermore, "The nurses' station is not only a physical space, but is a symbolic space, which may imply a certain status." (Gum *et al.,* 2012, p.22). Gum and colleagues posit that the existing power within a NS can result in social divisions, which can inhibit IPC. This symbolic space may act as a deterrent to some individuals who may be new to the group.

On reflection, at the beginning of my observations on the different wards, I always hesitated before 'invading' the NS space. It usually took three or four observation sessions before I felt confident enough to join the HCPs behind the desk in the NS. This feeling may also apply to other individuals who are perhaps new to the group. Therefore, HCPs need to be aware of the symbolic status that the NS and its desk may convey. In some circumstances, it may be necessary to strive to make the NS

more approachable in order to support IPC. Chiang (2010) adds that the whole hospital design may impact the level of interaction between staff.

IPC is often enacted through weakly scripted unscheduled encounters in the ward corridors. These chance encounters are important in coordinating work and help maintain continuity of work undertaken by various professionals who may be moving from one place to another and keep each other informed *en route*. When studying communication in two academic emergency departments, Eisenberg and colleagues (2005) had similar findings except their environment was more fast-paced and the interactions were more fluid.

In my study, HCPs were seen to interact as the need arose; usually to provide clinical information or to discuss issues that needed a clinical decision. Exchanges of a social nature between colleagues were also observed. The clinical and social encounters, mainly between nurses and doctors, enhance IPC. This is consistent with findings by Carthey (2008, p. 18) who asserts that one of the important functions of a hospital corridor is, "providing a setting that facilitates the interaction of multidisciplinary healthcare teams." In her observation of hospitals in New South Wales in Australia, most of the informal interactions occurred in the corridor more than anywhere else.

Becker (2007, p. 57) also observed that in neutral zones HCPs interacted as the need arose. He added that professionals of a higher status, such as doctors, were more likely to hesitate to diagnosis or to prescribe treatment when in a neutral space than in other spaces. Compared with their behaviour in other backstage spaces, such as the doctor's office or conference rooms, Becker found that doctors were more willing to listen to other professionals and take decisions collectively in neutral spaces.

Becker also analysed findings from Iedema and colleagues (2006) who studied an outpatients clinic in an Australian metropolitan teaching hospital where different clinicians came together fortnightly to run a clinic. They noted the role of corridor conversations in flattening hierarchy and accepting uncertainty:

> Corridor conversations allow certainty to be, at least temporarily,

> suspended. In the corridor, there is a tolerance for contingencies, for 'what ifs,' for 'let's go see.' ... corridors provide a space where usual professional hierarchies can be suspended (Iedema *et al*., 2006, p. 245)

The significance of finding backstage spaces to encourage informal conversations between colleagues to improve outcomes has also been highlighted in other contexts such as university research centres (Horwitz, 2005; Toker, 2006).

Although corridors were mainly backstage areas, they could still become frontstage if patients, families or visitors were nearby. HCPs were aware of this and spoke in lowered voices to maintain patient confidentiality, as if in this space they were more aware of being overheard by other patients and their families. In contrast, at the NS, the perceived barrier of the desk seemed to give a false sense of privacy and the HCPs very rarely lowered their voices. This calls for designing wards that not only provide opportunities for HCPs to interact informally but also provide designated central areas where HCPs can carry out day-to-day interactions with sufficient privacy.

HCPs in this study also made use of the examination/treatment rooms for negotiating clinical conversations or to address sensitive matters (Section 6.5, Excerpt One). In this incident an experienced nurse intervened after an altercation between a consultant and other nurses by waiting for the consultant to arrive in an examination room. However, examination rooms are not always available and any other HCP can walk in.

9.3 Strong scripts better at enacting other types of IPC

My data highlighted that the stronger the script invoked was, the more automatic the responses were, because we tend to relate to previous experiences of the same situation and this influences how we think and behave. Moreover, scripts develop in particular cultural contexts and are appropriate for certain contexts (Abelson, 1981; Schank & Abelson, 2013; Vanclay & Enticott, 2011). Therefore, a script developed in a particular cultural context may not work in the same way in another. An encounter that invokes a strong script in one context may invoke a less scripted response in another context. Strong scripts are at their best when invoked in situations where HCPs know they need to do something in a certain way as it is the

most efficient way and from previous experience, they know it works. So they follow protocol. Gioia and Poole (1984, p. 450) describe this as "knowing the ropes." This may be highly desirable in situations when quick, automatic responses are needed and when an encounter requires a highly structured format, such as the examples given in Sections 6.2 and 8.4 about a lumbar puncture procedure. A number of authors use the term 'routine' interchangeably with 'script' (Steen, 2007) because routines help to develop scripts.

These well-scripted procedures of getting through the required work without much discussion still contribute to IPC because HCPs from different professions are working together to provide a service to the patient. Each professional knows what needs to be done and also expects the other professionals to know what to do. This is why such procedures are usually performed by more experienced staff while less experienced staff observe. Through this observation, less experienced HCPs can build their own repertoire of scripts that become stronger when they start to actively participate in these procedures. Having said this, inexperienced HCPs are not a *tabula rasa* where scripts are concerned, even though the situation they are experiencing may be a new encounter. This is because we are social beings and therefore develop scripts from our previous social interactions (Goffman, 1959).

During most encounters, we invoke previously learnt social scripts instead of having to think what to say or how to act in each occasion. It is more likely that strong scripts are invoked by those HCPs who are experienced and that is why purposely invoking a multi-level script is appropriate in certain encounters, especially where a mix of different professions and grades are participating. This is discussed further in Section 9.4.

The strongly scripted stages of the ward rounds and its routinised nature, offer structure to the participants produced by the continuous repetition of what happens in the ward round day in and day out. The strongly scripted stages invoked during MDT meetings also ensure efficiency of the time spent in these meetings. These structures also enable participants to make quick complex decisions based on previous similar encounters and similar to pattern-matching (Charlin *et al.,* 2000).

When highly strong scripts are invoked it becomes similar to when doctors match patterns during diagnoses (Charlin *et al.,* 2000). When doctors are confronted with a patient who they need to diagnose, they form a hypothesis from their past experience and knowledge by unconsciously associating the present situation with one stored in their memory (Barrows & Tamblyn, 1980). This pattern matching is similar to invoking scripts automatically (Lesgold, 1989) and that "the main function of scripts is to construct interpretations of situations." (Charlin *et al.,* 2000, p. 184). Having said this, Charlin and colleagues also claim that even during automatic pattern matching, which is the phase when the script is invoked, this is followed by a degree of controlled thought process when a problem is being solved or a diagnoses formulated. For this reason, Feltovich and Barrows (1984) claim that each clinical encounter creates a new script because scripts are dynamic structures which change during each encounter.

Conversely, there is a drawback with strong scripts in that, "... as a practice becomes more repetitive and routine, and as knowing-in-practice becomes increasingly tacit and spontaneous, the practitioner may miss important opportunities to think about what he is doing …" (Schön, 1984, p. 61). The invoking of strong scripts in healthcare may sometimes result in not probing enough into a situation and the HCP may come to the wrong conclusion or exclude other HCPs from interacting and sharing their expertise, discussed further in Section 9.2.1 when the degree of reflection during an encounter is analysed. By invoking strong scripts and not allowing space to stand back and look at a situation may "carry a danger of misreading situations, or manipulating them, to serve the practitioner's interest in maintaining his confidence ..." (Schön, 1984, p. 44)

9.4 Metascripts

Ward rounds and MDT meetings were designed to provide opportunities for IPC. However, literature has shown that this is not always the case. Lewin and Reeves (2011) affirmed that the more formal and frontstage planned encounters were, the less IPC was observed. My observations revealed the same findings, which is unfortunate since some professionals have most patient contact during the ward rounds (Dufñn, 2012). However, looking at IPC through the lens of scripts led to a

deeper analysis of the ward round and MDT meetings, and new findings emerged. As argued in Section 7.2 and 7.3, although these are highly routinised encounters (Stelios *et al.,* 2013), strong scripts did not strictly guide them as I had initially believed.

Multilevel scripts, creating what I call a metascript, ranging from strong to weak scripts, guided these encounters. To the best of my knowledge, there is no healthcare literature that discusses metascripts and therefore this is a new concept for the study of ward rounds and MDT meetings. A metascript is defined as a network of scripts that may be complex and are shared between individuals (Boje, 2002). The notion of metasripts is sparingly discussed in literature, such as in Zohar and Luria (2004) who studied high complexity scripts in an army brigade while simulating complex battle missions. They assert, "identification of particular meta-scripts offers a methodology for culture research" (p. 856). Metascripts stored in individuals' memory, go through adaptive changes as each metascript becomes refined (Rasker, Post, & Schraagen, 2000). A discussion of ward rounds and MDT meetings metascripts is presented in the next sections.

9.4.1 The ward round metascript

Ward rounds have been recognised as complex interactions and have attracted significant research attention, focusing mainly on the time spent near the bedside (Muething, Kotagal, Schoettker, Gonzalez del Rey, & DeWitt, 2007; Spoor & Balu, 2015). It has also been defined as a complex clinical process where patients' care is reviewed (Royal College of Physicians & Royal College of Nurses, 2012). However, in this study, the ward round was seen as comprising five different stages that together were guided by a multilevel script which I have now identified as a metascript (Figure 7.1). Analysing my findings through the lens of scripts has helped me to categorise the different stages of the complexity of the ward round and how each stage, whether weakly or strongly scripted, contributed to IPC. As discussed in Section 7.2, during the complex five-stage process of the ward round, participants pooled information that they purposely selected to be shared with other professions. They could do this because during the metascript of the ward round, HCPs used the weakly scripted stages to share this information. While the strongly scripted stages gave structure and helped the doctors leading the ward round to efficiently move

from one patient to the other, the weakly scripted stages were more open to interaction from other HCPs. Therefore, each category had its purpose. Indeed, metascripts provide an analytical guide to understand crucial situations and events (Zohar & Luria, 2004).

During my initial analysis, I assumed that if certain professionals were not present during the ward round, these professionals were not participating at all. However, identifying the different stages of the ward round helped me to see that other professions, besides the doctors, were also contributing to the ward round at different stages and this was a crucial finding. Nurses especially were inclined to contribute during the weakly scripted stages at the beginning and end of the ward round (Figure 7.1) and just because they were not always visible at the bedside does not make them invisible in the ward round. When they were not present, their contribution was given during some other stage of the ward round. This is why it is important to look at the ward round more expansively.

During the strongly scripted and formal stages, the more experienced HCPs, such as the medical consultant or senior doctor, dominated the ward round. Another finding, highlighted in Section 7.2, was that doctors gave more importance to the ward round than any other profession and were usually the ones who started and led them. This is similar to findings in other studies (O'Hare, 2008). Indeed, previous literature reveals that traditionally, the ward round was mainly the doctor's domain and they still continue to take a leading role (Herring, Richardson, & Caldwell, 2013; Liu, Manias, & Gerdtz, 2013). This may be because potentially this is the only encounter they have with the patient throughout the whole day.

On the other hand, nurses are not always present for the ward round near the bedside depending on their availability. The lack of participation of nurses at the bedside in the ward round may be due to nurses not being prepared enough for this role (Manias & Street, 2001) and they may be using lack of time as an excuse to avoid ward rounds. Nurses' inconsistent presence during ward rounds has been well documented by Busby and Gilchrist (1992) and later by Weber *et al.* (2007) and Herring *et al.,* (2013), suggesting that little progress has been made despite literature showing that nurses' presence in the ward rounds is important (Herring *et al*., 2013; Royal College

of Physicians & Royal College of Nurses, 2012; Stelios *et al*., 2013; Merrick Zwarenstein & Bryant, 2000). However, my findings show that nurses are still contributing to the ward round but in a different way, perhaps during a time and place that fitted more with their work schedule. The contact with the patient during other times of the day, perhaps was enough for them to keep themselves informed and contribute to the ward round even though they are not necessarily by the bedside.

During my observations, some nurses who were usually more experienced, showed participative engagement in the ward round and were visible, next to the patient and capable of being their patients' advocate (in real time). When nurses were present, usually the nurse-in-charge, they would participate and interact mostly during the weakly scripted phases, the same as the patients and families. However, as observed, the nurses' and patients'/families' contributions were not documented by the doctor in the patients' notes. I will focus here on the nurses' contribution as part of IPC. Perhaps some nurses' lack of participation in the ward round may be due to not having their contribution documented and therefore not considered as important.

Literature shows that if nurses feel the ward round is a medical ritual and that their involvement is tokenistic then nurses disengage; they may not attend or they may be physically present but disengaged (Stelios *et al.,* 2013). Although nurses were listened to, the doctor rarely documented the nurses' contribution. So perhaps the ward round in this setting needs more structure. Not documenting everyone's contribution during the ward round is consistent with findings by Spoor and Balu (2015) who studied quality issues related to ward rounds in a 25-bed paediatric unit in the UK. They found that the introduction of a five-item checklist helped to have a more structured ward round resulting in providing a safer service and better documentation. In my study, although a metascript guided the five stages of the ward round, this does not mean that HCPs did not miss out on certain aspects of the patients care plan (Section 8.3.1, Excerpt Two). Missing out on certain aspects of care is similar to other studies by Newnham, Hine, Rogers, and Agwu (2015) and Shaughnessy and Jackson (2015) who tried to find methods on how to solve the problem of having a more comprehensive ward round, all focusing on what I identified as Stages Two to Four of the ward round. Shaughnessy and Jackson

(2015) affirmed that the introduction of a ward round safety checklist resulted in the nurse having a better understanding of his/her role in the ward round and therefore he/she participated more and felt part of the team.

Participation was further enhanced in wards where a mnemonic was developed to improve the quality of doctors' documentation where the nurses' contribution was also documented along with the doctors' notes (Newnham *et al.,* 2015). Newnham and colleague's study was conducted in a large and busy teaching hospital in the West Midlands, UK. The mnemonic also helped in reducing omissions in patient care and ensured that the doctors especially, heard the patient and that all aspects of care were reviewed. The mnemonic is:

***P*lease *V*erify *I*nformation *F*or *D*octors, *P*lease *N*ote *E*very *P*lan**

The first letter of each word has a particular meaning as follows:

- *P*: Problem
- *V*: Vital signs
- *I*: Investigations
- *F*: Fluids
- *D*: Drugs
- *P*: Parents/patients' concern
- *N*: Nursing concern
- *E*: Examination
- *P*: Plan

Overall, "the introduction of the acrostic [mnemonic] led to improvement in the documentation of key aspects of the ward round" (Newnham *et al.,* 2015, p. 24). Although it took longer to document all aspects suggested by the mnemonic during the ward round, it saved time later on by having everything documented in one place. This could be seen as a recommendation for this study to further enhance the effectiveness of the ward round and encourage nurse participation. Perhaps another letter could be added to the mnemonic to include other HCPs' contribution when they are present.

I believe that the last *P* in the mnemonic is the essence of the whole. *P*lan is very important as this should remind HCPs that IPC entails jointly constructing the patient's plan of care and not merely the joint understanding of that plan as is currently the most common practice in this setting.

Other scholars have observed that decisions for care plans are mostly taken by doctors, sometimes in conference rooms and offices away from the MDT and patients (Rosen, Stenger, Bochkoris, Hannon, & Kwoh, 2009). This needs to change if the full benefits of IPC outlined in Section 2.4 are to be gained. If IPC promises to provide a safe and efficient patient service, then decisions taken during the ward round need to include other professionals, besides doctors (Paradis & Reeves, 2013; Paradis, Leslie, & Gropper, 2016). Moreover, the ward round needs to be structured and effective. This includes documenting all actions taken during the ward round (Spoor & Balu, 2015).

The input and participation of other professions in the ward round also depended on the individual's agency and the consultant's willingness to invite participation from all professions. My findings show that other professions, mainly nurses, usually stay at the periphery of the ward round group and their contribution is more prominent when they move to the front (Section 8.8). History has shown that doctors dominate ward rounds (Liu *et al.,* 2013) and that ward rounds can be a place where professional power and hierarchy are sustained (Fox, 1993).

In a critical ethnography conducted on two medical adult wards in Australia, Liu, Manias and Gerdtz (2013, p. 125) declared "the nurses' voice in ward rounds was largely missing" and the doctor leading the ward round regulated the inclusion in the inner circle and participation. They also stated "doctors' physical positioning on the ward conveyed the message of differential power" (Liu *et al.,* 2013, p. 130). These researchers also looked at the activities that doctors carried out during the various stages of the ward round but focused mainly on the performance of the senior doctor or consultant. Their study concluded that there was a lack of IPC during the ward round. However, similar to my study, there were occasions when the nurse was more engaged in the ward round and took a position at the front near the bedside of the

patient such as in the example in Section 8.8. There were a few other examples in my fieldwork of nurses moving to the front, overcoming the "barrier of white coats" (Paradis *et al*., 2016, p. 744) and of nurses engaging in the ward round.

9.4.2 The MDT meeting metascript

Although MDT meetings were held regularly in one ward and occasionally in others (Section 7.3), they contributed a substantial degree towards IPC in this paediatric setting. These were the few occasions where a range of professions gathered to discuss patients' care plans, especially during the case conference meetings.

The metascript guiding the MDT meetings was not as structured as the ward round metascript but also had weak to strongly scripted phases. Whilst, at one level, the MDT meetings are vital and ideally more people would be included more of the time, in practical terms expansion of this would be very difficult. During one of the formal interviews, a consultant confirmed this:

> *The problem here is that having multi-disciplinary team meetings is not very easy although it is desirable, it is very difficult to organise but we do manage to get all the people involved in a certain … in a particular case on board with the treatment and discussions and so on or so forth, alright? It is just more hard work* **[Formal Interview: Consultant].**

MDT meetings require considerable organisation, getting all concerned professionals in one room, and having all patient information at hand (Fleissig, Jenkins, Catt, & Fallowfield, 2006; Goolam-Hossen *et al*., 2011). Despite this, every effort should be made to hold these meetings more regularly and across all areas of the paediatric setting due to the benefits claimed by various researchers.

Discussing care plans in adult MDT meetings regularly held in a central specialist unit of upper gastro intestinal conditions in the UK, the authors found "improvements in care such as decreasing the time from diagnosis to treatment ... and greater patient satisfaction" (Strong *et al*., 2012, p. 957). This echoes previous findings by Boxer, Vinod, Shafiq and Duggan (2011) who also studied MDT meetings but with adult cancer patients.

Similar to the ward round metascript, more structure to the MDT meetings has been found to improve group processes (Michan & Rodger, 2000; Tyson, Burton, & McGovern, 2014) and these authors even recommend further research on how to structure and format these meetings.

Tyson and colleagues, while reviewing MDT meetings in eight inpatients stroke rehabilitation units in the UK, identified elements that make these meetings more successful. They claimed that meetings where a "facilitative leadership style and of collective, shared leadership" was as positively effective as those meetings which were traditionally hierarchical in nature (Tyson *et al*., 2014, p. 1245). They comment that structure and chairing skills are very important in these meetings. They also identify some challenging demands, such as managing time and workload.

Tyson and colleagues recommend that successful meetings require the following key elements namely; a set agenda, which is similar to the metascript in my study; structured documentation, a feature that was also discussed in Section 9.4.1 when discussing the ward round metascript; formal use of measurement tools to assess patients; pre-meeting preparation; and skilled chairing (Tyson *et al*., 2014, p. 1246).

In a follow-up to the initial study, Tyson, Burton and McGovern (2015) conducted a longitudinal cohort study in stroke rehabilitation units to develop a model to structure MDT meetings which they called the Manchester Multidisciplinary Team Meeting Model or M4. This model has the potential to improve the MDT meetings without adding more resources.

Lamb, Sevdalis, Vincent and Green (2012) also developed and evaluated an evidence-based checklist, validated by key user groups, as a tool to support decision-making during cancer MDT meetings. This checklist, which is known as the MDT-QuIC and details of which are available in the article (Lamb *et al*., 2012, p. 1760), may be a recommendation for use in the setting of this study. This checklist has four key components, each having its list to be checked.

The components include:

- **Before case discussion**
  - Are sufficient core members present?
  - Is someone present who knows the patient?
  - Is the patient's key worker present?
- **Information**
  - Case history
  - Comorbidities
  - Radiological
  - Pathological
  - Psycho-social
  - Patents' views
  - Clinical trials
  - Other
- **Discussion**
  - Surgeons
  - Physicians
  - Oncologists
  - Radiologists
  - Pathologists
  - Nurses
  - Palliative care
  - Allied healthcare professionals
- **Outcome**
  - What are the recommendations of the MDT?
  - Are there any objections?
  - Does this patient need further discussion?

In contrast with the mnemonic used for the ward round in Section 9.4.1, this checklist included the allied health professionals. On evaluating practice after the implementation of this checklist, Lamb and colleagues (2012, p. 1763) stated that it "may help to ensure that factors that are a prerequisite for high-quality discussion are present in order to ensure a minimum safe standard."

9.5 Interplay between synchronous and asynchronous IPC

Information exchange and its components have already been discussed in their association with synchronous and asynchronous IPC (Chapters Four and Five). The components were: asking for information and associated responses, giving of information proactively, transferring of work and escalation of care, and two-way negotiation. In these two chapters, I established that IPC was enacted through a multi-layered approach to communication.

Synchronous IPC, mainly that enacted face-to-face, formed a substantial component of my data corpus (Chapter Four). My observation sessions were mostly spent observing such interactions, as I believed that these were an important aspect of IPC. However, synchronous collaboration cannot function alone but is substantially supported by asynchronous collaboration (Chapter Five). Asynchronous IPC is ubiquitous – happening everywhere, all the time and it is surprising that there is relatively little attention to this in the literature. Asynchronous collaboration is not simply a matter of not happening at the same time but also importantly, it does not need to happen at the same time (Edwards *et al*., 1997). Asynchronous collaboration in this study setting was paper-based or electronically-based. In common with other hospitals, the study hospital was adopting new ways of computer-mediated communication at the time of observation.

In the next section, I discuss the interplay of synchronous and asynchronous IPC and in doing so, I have attempted to extend the "limited research on what type of communication actually occurs between health professions" (Alvarez & Coiera, 2006). While Nardi and Whittaker's (2002) ethnographic study on workplace communication highlights that face-to-face communication plays an important role in developing social interactions that are crucial for organisational success, the findings of my doctoral study have also highlighted the importance of asynchronous communication that occur between professionals. Asynchronous collaboration is enacted through paper-based written information such as patients' notes, nurses' report, referral forms, notice boards, ward diary, and ward-round-book and by use of technological devices, such as electronic mails (e-mails), CPAS for patient details, iSoft laboratory information system for pathology results, and PACS for radiological

results (Sections 5.2 - 5.3). Findings show that these paper-based and technological sources compliment and add to synchronous collaboration and that each method has its uses.

Face-to-face, synchronous communication during all kinds of encounters is central to successful IPC and quality care (King, Bravington, Brooks, Melvin, & Wilde, 2017; Smith, 2005). However, the crucial part played by asynchronous collaboration cannot be underestimated, especially with the shift towards computer-mediated communication, which "enables healthcare teams to document and disseminate information quickly and efficiently." (Vroman & Kovacich, 2002, p. 159).

Clinicians using communication technologies have shown that asynchronous collaboration also improves team relationships, staff satisfaction and better patient care (O'Connor, Friedrich, Scales, & Adhikari, 2009). Their study was conducted in a 26-bedded medical-surgical ICU in Canada where they assessed the impact of using wireless e-mail for clinical communication. Therefore, the contribution of asynchronous collaboration cannot be overlooked while at the same time remaining conscious of its drawbacks. Participants in the O'Connor *et al.'s* study showed concern that asynchronous ways of communication led to a decrease in face-to-face interaction which is more suitable in complex patient cases. The results in their study are to be interpreted with caution as professionals were using wireless devices that were constantly available in the professionals' hands, while participants in this study site were using e-mails and viewing electronic images and laboratory results through desktop computers that were not immediately available at the bedside. This implies that for the study setting to benefit fully from asynchronous ways of communication, it needs to move towards more flexible electronic devices, such as wireless tablets or smart phones.

Despite the availability of asynchronous sources, several HCPs frequently asserted and showed that they preferred to interact face-to-face when they needed to collaborate (Section 4.2, Quotation Three; Section 5.2.1, Quotation Two). The success of face-to-face interaction depended on the receiving person's availability, as this mode of communication may sometimes have negative repercussions, such as interrupting an on-going discussion as described in the first of the given examples.

At times, information can be obtained from asynchronous sources and what needs to be communicated does not always need a synchronous response; this is when asynchronous ways of communication are more appropriate. Written down information is there to be accessed by other HCPs at any time necessary (Cabitza *et al*., 2009) and when this is done electronically it can be accessed from multiple sites. It is there, available at all times, especially when HCPs want to clarify earlier verbal instructions. This, however, requires the HCP to know where to look for information and to go and refer to it on an appropriately regular basis.

During face-to-face interaction there is more than just the exchange of information because during these encounters, relationships develop and are maintained in the long-term. These are developed because interactions related to patient care may also contain social banters, especially when enacted in the backstage areas. These findings are in parallel with those found by King and colleagues (2017) when examining collaborative working among generalist and specialist nurses working in community and acute settings in the UK. Moreover, Collins and Currie (2009) found that in an ICU, direct verbal communication is one of the main sources of building trust among clinicians.

Most of the synchronous IPC was enacted during the encounters identified as the ward round, the MDT meetings, and day-to-day unscheduled meetings. These were observed to happen during very busy times of the day, mainly in the mornings. On the other hand, asynchronous communication gave the possibility of flexibility for HCP to access the information during less busy times of the day and follow-up on the issues raised by other HCPs. This observation also indicates that the interaction adopted during fast-paced activities, such as certain stages of the ward round or MDT meeting, was more direct and synchronous than other less important or normal paced activities but then was supported by written information to be accessed asynchronously. This implies that any given encounter may comprise of both synchronous and asynchronous communication.

Another issue observed was that the information conveyed asynchronously, such as the patients' notes, was formal (highly scripted), to the point and did not have much detail or explanation. This was, however, often followed by synchronously conveyed

information where, HCPs could interact more, giving a more expansive account. When communicating synchronously, HCPs also had the opportunity to ask for clarification there and then, shared more informal information and had the potential to solve the problem at hand (Section 8.3.1, Quotation Three).

Irrespective of whether IPC and communication are carried out face-to-face, on paper or virtually, "an effective interdisciplinary team is dependent on the quality of the communication between the members" (Vroman & Kovacich, 2002, p. 168). If collaboration involves sharing of information, then doing this synchronously or asynchronously should be equally important because they both have their benefits.

Asynchronous IPC supports synchronous IPC and, together, these complementary forms of IPC support good care. Synchronous collaboration has immediacy as its strength while asynchronous collaboration does not need to happen at the same time. Whatever type is used, HCPs will still need to understand the dynamics of IPC and one of its most important processes of information exchange. Understanding how scripts influence and guide these processes further enhances IPC (Chapter Six).

9.6 The scriptedness of enacting IPC

IPC was analysed through the application of Goffman's (1959) dramaturgical social theory, in particular through the lens of scripts. Analysing my data through this lens highlighted the importance of looking at the micro-level aspect of IPC, especially the central idea of understanding information exchange and its constituent acts. As my findings show, encounters during IPC entail more than classifying them as formal or less formal, or frontstage or backstage, but that each encounter is a complex performance with the ward as a stage and participants being both actors and audience. Vanclay and Enticott (2011, p. 267) argue, "scripts are an important feature of all social interactions and influence all aspects of life." An issue that makes scripts important is that they provide a scenario where previously thought-out activities can be invoked. Schank (1980, p. 271) had already identified that "the ultimate purpose of scripts is as organizers of information in memory."

Scripts contribute to how we see the world, but scripts may also limit the range of alternatives individuals might choose in specific situations. This is why it was important to consider the strengths and weaknesses of all categories of scripts.

Drawing from Goffman's (1959) concept of scripts, a typology of the categories of scriptedness was modified (Figure 6.1) based on that created by Gioia and Poole (1984) (
Figure 3.1). This lens was used because it helped me to better understand the dynamics of interactions during encounters. It became clear that different encounters invoke a continuum of scripts, ranging from strong ones that are well-rehearsed scripts that support efficient work in familiar situations, to weaker more flexible scripts that support work which need more reflection during enactment.

Through understanding the influence of scripts ingrained in our memory, we can become aware of when to invoke strong or weak scripts. Strong scripts are invoked when we need to be efficient and when participants anticipate a scenario that is known step-by-step. However, strong scripts need to be occasionally challenged and this is when weak scripts are used to reflect on the way we usually do things. When weak scripts are invoked frequently, they themselves develop into strong scripts. Despite the benefits of scripts, Gersick (1988) asserts that, in time, scripts develop into routines that become every day practice and are taken for granted by participants. Thus, well-developed scripts tend to prevent us from looking closely at situations and critiquing ideas presented to us, while at the same time provide a structure that can make a group exclusive.

Throughout the analysis, a very important insight that stood out is that both strong and weak scripts are necessary for IPC because they have different functions and effects. However, one of the messages in the findings is that encounters invoking weak scripts are better at generating certain types of IPC (Section 9.2). At the other end of the continuum are strong scripts. Strong and weak are difficult terms. Normally, 'strong' reflects good or better; so this finding feels a bit contradictory. The strength of strong scripts lies in efficiency, structure, control (Section 6.2), while the strengths of a weak script are in its capability to give space for more reflection on the interaction, giving more opportunity for IPC (Section 6.4).

When analysing IPC, understanding the different categories of scriptedness helped to appreciate certain behaviour of HCPs. Scripts not only guide us in our thinking and actions but also influence an individual's expectations of how other persons should behave and how an encounter should develop. This phenomenon was closely studied in farming and agriculture by different researchers. Silvasti (2003) studied Finnish farmers and their relationship with nature and the importance of agriculture to human beings. She referred to scripts as "a kind of mental map that are developed and used to organise behaviour" (2003, p. 144) and thus, organise agriculture itself. These mental maps were so instilled in these farmers that attempts to change or ignore them usually failed. The scripts identified by Silvasti in Finland were also identified in Australia by Vanclay, Silvasti and Howden (2007) and later in the UK by Vanclay and Enticott (2011) and seen to structure the behaviour of farmers in most industrialised countries. The more we understand the role and function of scripts, the more likely we are able to identify which script is being invoked in a particular context.

In certain situations, stronger scripts can influence the outcome of an encounter because the well-rehearsed script becomes a tool "for influencing desired behavioural changes" (Gioia & Manz, 1985, p. 534), behavioural changes that are not always desired by everyone participating in the encounter. When this happens, the outcome of strongly scripted encounters may not always be appropriate. Without challenging these strong scripts a learned sequence of actions creates a stronger script to be invoked at a later experience (Gioia & Manz, 1985). An example of this is the episode when a lumbar puncture procedure was performed and the main professionals, that is the doctor and nurses present, expected and demanded that the mother leaves the examining room, without first finding out what the wishes of the mother were (Section 6.2, Excerpt One). The professionals' expectations, guided by the strong script invoked, expected the mother to behave in a manner that they were used to. In other circumstances, the mother may have preferred to stay in the room for the procedure and help to settle the infant; this could have resulted in a more beneficial outcome.

Another feature of scripts is the question of why a script is being invoked (Schank, 1980). Schank affirms, "We cannot get away with simply applying scripts. Rather we will have to consult many levels of information at once" (1980, p. 259). Therefore, the script invoked and the reason why may depend on the other information individuals tap into. At times, participants may draw on strong scripts to perpetuate social structures or encourage status quo, phenomena that do not concur with IPC. Although I have no example of this in my data corpus, I refer to an example by Barley (1986) and Barley and Tolbert (1997) given in Section 3.4.2 when they discuss how "direction seeking" script reinforced medical dominance in a radiography department, a healthcare setting scenario similar to that of this study.

Findings also showed that more than one script may be active during an encounter which made it more complex to analyse. HCPs enacting IPC came from different levels of work experience and also professions. Therefore, an encounter that might invoke a weak script for one person, might invoke a strong script for another. It may also be an encounter that is unscripted for some participants. Moreover, the different categories of scriptedness that may be encountered simultaneously, may not only distract one script from the other, but also interfere with each other (Section 4.5, Excerpt Four). This is confirmed by Schank and Ableson (1977, p. 58) who concur, "When two scripts are active at once they compete for incoming items of information." In a context where scripts invoked are familiar to all participants, this may not cause a problem since individuals will understand the meaning of the other person's actions and how to respond to them. However, problems may arise when scripts learnt in one context are invoked in another context where the other participants may not be familiar with the script and therefore may not be understood.

9.7 The usefulness of analysing IPC through the lens of scripts and its contribution to knowledge

Theory helps to provide insights about a phenomenon and also guide research. Conversely, "research validates and modifies theory" (Meleis, 2011, p. 20). Theories also help researchers to understand complex phenomena that are not easy to examine, including "why individuals interact in certain ways" (Reeves & Hean, 2013). In the literature reviewed pertaining to IPC, various researchers used different

theories to guide their research, especially when analysing data (See also Section 2.9). Similar to my study, some researchers used an aspect of Goffman's (1959) social dramaturgical theory but to the best of my knowledge, none have used the lens of scripts.

The lens of scripts was utilised to analyse my data corpus and examine how IPC was enacted in the study setting. Here, I will highlight how Goffman's concept helped in the understanding of what I consider to be the most useful aspects of my findings. The lens of scripts helped me to consider the ward round in a different light. Although it was initially assumed that the ward round was strongly scripted due to its routinised agenda, its metascript revealed that a more complex script was guiding it. This may have helped to appreciate the contribution other professionals, mainly nurses, give to the ward round, even though they were not always by the patients' bedside during this time. By considering the ward round as a five-stage process, with different categories of scripts guiding each stage, other professions' contributions became more visible. Examples of how nurses or other HCPs participated in some stages during the ward round were given in Sections 7.2.2 to 7.2.6.

Scripts also helped to emphasize the importance of the interactions during the unscheduled day-to-day meetings and made them more visible (Section 6.4 and 8.2). Despite several studies using different lenses to shed light on findings, a common thread in most studies was the importance of the unscheduled day-to-day meetings (referred to by diverse names in different studies) and their contribution towards IPC and how these are under-researched (Ellingson, 2003; Hurlock-Chorostecki *et al*., 2015; Lewin & Reeves, 2011; Reeves & Lewin, 2004). Theories used by these researchers include Goffman's (1959) backstage and frontstage as well as impression management and Engeström's (2008b) knotworking.

HCPs and management may not be aware of the degree of collaboration that is achieved through these unscheduled interactions. These encounters sometimes happen in places were HCPs meet by chance and are often rendered invisible. Even though they occur by chance, since they work in the contained environment of a ward, HCPs are bound to meet often. Looking at these unplanned meetings through the lens of scripts made me realise that there were different levels of such meetings

and that they provide the opportunity of immediacy of IPC. However, had the HCPs not met by chance, then IPC would most likely have happened anyway. They could have collaborated asynchronously, depending on the urgency of the situation. Perhaps information is shared at the first opportunity that HCPs are scheduled to be in the same place at the same time, such as ward rounds or MDT meetings.

My observation that these unscheduled meetings may be invisible is similar to Nardi and Engeström's (1999) work. They affirm that much of every organisation's work is visible and can be quantified; however, Nardi and Engeström also state, "a growing body of empirical evidence demonstrates that there is more to work than is captured" (1999, p. 1). Nardi and Engeström identify four kinds of invisible work, one of them includes work done during informal work processes and conversations without a specific agenda, similar to the unscheduled encounters observed.

Work may be invisible except for those who are actually performing it, even though they may not always be aware of what they are achieving. Participants in this study confirmed this during the formal interviews (Section 6.4). Star and Strauss (1999, p. 15) also identified this invisible work as "disembedding background work" where they describe work "where the workers themselves are quite visible, yet the work they perform is invisible ..." and disappears into the background. The reason why I think these interactions need to be more visible is so that HCPs will start to appreciate the contribution they are making on a daily basis towards IPC.

Ultimately, considering my data through the lens of scripts helped to examine how scripts served to: provide structured knowledge which was necessary to understand why HCPs behaved the way they did; help HCPs to integrate a new event with previously learnt scripts; acknowledge how the categories of scripts helped in invoking information stored in memory, and; understand why in many encounters HCPs predicted what was going to happen. This is consistent with findings by Custers (2015, p. 457) who studied "illness script" in medical education literature and how the illness scripts that new doctors acquire in the beginning of their clerkship become more tuned to practice and had educational implications.

Ultimately, the lens of scripts helped me look closer at different ways IPC can be enacted. In this study setting, I have focused on IPC as I was interested to determine how IPC can be enacted during different categories of scripted encounters and not because it is better developed or that HCPs have special training. Perhaps, the lens of scriptedness can also be used diagnostically to identify the extent of the development of IPC in other areas and perhaps used developmentally to help improve levels of IPC (Section 9.11.1).

9.8 On being a practitioner/researcher

The envisaged issues of being an insider or outsider researcher were discussed in Section 3.6. The aim of this section is to reflect on how my position as a practitioner/researcher actually developed throughout the research process, but mainly during data collection and analysis. Earlier in my career, I worked as a nurse in the study setting and, for the past 23 years, as a university-based nursing tutor teaching paediatrics. I also briefly returned to the clinical area in 2004. Some of the participants are therefore former colleagues or former students. To a certain extent, I share an identity and a language with most of them and thus, I may have been more accepted by the group (Asselin, 2003).

With my background as a paediatric nurse, I was able to draw on my past experience to build a *rapport* with the participants. This enhanced the depth of the data gathered, which might not have otherwise been available to outsiders who are not familiar with the setting (Kanuha, 2000). However, this also raises issues of objectivity (Section 3.6 and 9.9.4), reflexivity (Section 3.10), and authenticity (Section 3.10) especially if I knew the participants well or was too familiar with working practices. This might have prevented me from noticing some things.

Carrying out fieldwork in a familiar setting may have also hindered me from seeing the unusual in everyday practice and situations (Delamont, 2004). This is why I also used the data collected during initial observations, as I felt there was an opportunity to view the setting with a fresh mind, since I had not worked in a clinical area for eight years. Another important aspect is that I had only worked in one of the wards observed and this was when it was situated in the old hospital. Therefore, being in a

new hospital and also observing three other wards, helped me, as a researcher to view things which had been introduced since my time on that one ward.

Before leaving my office to go in the field, I always put on an identity badge marked 'RESEARCHER.' Besides functioning as a label to inform HCPs of my role there, it also served to remind me of my role as a researcher. At the beginning of data collection, I did notice that being so close to the participants did sometimes affect the way I wrote my field notes *in situ*. This included taking some things for granted and not describing certain key elements in detail. While writing more extensive field notes and reflecting on my experience in the ward, I realised that this was happening and how important it was to write more detailed notes. It took me a while to learn to question what I was observing due to my familiarity with the setting. I consciously had to question everything and I made a special effort to make the familiar look strange (Van Maanen, 1995).

On the other hand, I had not worked in the paediatric setting as a nurse for some time. Also, I did not participate in the core activities of the participants during my study. I therefore constantly clarified and checked what I was observing. I did this by verbally member checking any unclear episodes during the course of the observation session through informal conversations and confirmed by the readers by having findings closely represented through verbatim extracts.

In the early stages of the research process, I set out with an open-ended approach towards understanding how IPC is enacted in this setting. During cycles of data collection, reviewing data and preliminary analysis, the study became progressively more focused on where and how IPC was enacted. Moreover, as a researcher, I needed to discover for myself what was needed in the research process of an ethnographic study (Hammersley & Atkinson, 2007, p. 20). Ethnographic research cannot be strictly programmed and I needed to be aware and ready for the unexpected.

This was the second time I was using ethnography for research; my first experience was in my Master's dissertation. Despite this, I still considered myself as an inexperienced qualitative researcher and I still needed to prepare myself. No matter

how well prepared I was as a researcher, not all problems can be anticipated or for that matter, even resolved. An example of one such problem was having to constantly decide which conversation to follow when there were three or more conversations going on simultaneously. I usually decided to follow the conversation that contained new participants who had not been previously observed. Another determinant for sometimes choosing a certain conversation was that by choosing it, I would be following up what was previously observed. Having done this, I would never know whether attending to something else may have generated more insight and this is acknowledged as a limitation in Section 9.10. Indeed, Maxwell (1996) states that the research design is crucial to ethnography and needs to be guided by reflexivity throughout the whole process. The issue of reflexivity was discussed in Section 3.10.

By being marginally participant-as-observer (my main role was being an observer) (Section 3.7.2), may have helped me in not becoming uncritical about the viewpoints of those being observed. By participating in minor mundane tasks, helped me to integrate more with the participants and fit in in this setting. While being mainly an observer worked well as I could observe without any interruptions.

I was also aware that I needed to stop myself from becoming completely immersed in the setting, especially since it was my former work setting and therefore familiar to me. With every progressive observation, I learnt how to guard against this more effectively. Having a pen and notebook in my hands and not wearing a uniform constantly reminded me that I was mainly in the field as an observer. The volume of written field notes at the end of each observation session was enough evidence that I was doing this successfully.

Having said this, conducting research in a familiar environment does have its benefits in terms of reciprocating my expertise and knowledge in the field to the participants when needed (Hammersley & Atkinson, 2007). These occasions were few, avoiding the problem that such an activity might incur, such as taking up valuable time from what would otherwise have been spent in observation. A simple but important example of this was when a doctor was preparing a trolley to perform a lumbar puncture. This is usually the nurse's job but at that moment, they were all

busy. Seeing that the doctor was hesitating with the equipment and doing it incorrectly, I gently offered to help him, which he accepted. By helping him, I was also showing him how to correctly prepare the trolley for an aseptic technique. While becoming a participant at that moment, this event served to show the other participants that I was willing to help when the need arose and helped them accept me as one of them. This intervention then led to my observing the participants during the procedure. Therefore, a balance between time spent observing and participating was established.

Another issue is that of being accepted and trusted. An example of this was when HCPs, including some consultants, sometimes felt it necessary to update me on the patients' medical history especially in between moving from one patient to the next during the ward round. I never questioned why they felt they needed to do this. Perhaps it was because they knew I was not there every single day and professional courtesy demanded that they update me. It could also be that they were simply treating me like any other clinician who might have been there and lacked the knowledge they imparted. On the other hand, perhaps they wanted to impress me or ensure I understood what would frame the discussion I was about to witness. The effect it had was that it made me feel accepted and trusted and I felt that this enhanced my relationship with the participants. Being more informed about the patients also helped me follow the content of the different stages of the ward round.

I sometimes unknowingly immersed myself as a total participant and 'went native' which may have resulted in too much *rapport*, especially with some participants. I usually realised this when I wrote my reflexive notes after an observation session. This usually happened with other nurses because of my background in nursing. This group is where I established most *rapport* and influenced what information I accessed. This may be considered as a limitation to the study. However, Adler and Adler (1994) assert that it is better to highlight the richness and advantages of subjective aspects of a study than to dwell on objectivity. I was always aware of the pitfalls of being a practitioner/researcher caused by role conflict. This risk can occur in any research study but is more commonly experienced when the researcher shares the same background as the participants (Asselin, 2003).

Moving from one ward to the next provided me with the "analytical space" needed to analytically evaluate what was going on in the different wards (Hammersley & Atkinson, 2007 p.90). After observing a particular ward for some time, there came a point where I felt that I was commenting on the same things that I had in the previous ward. I needed to create a check to ensure that I had really finished observing this particular ward. I challenged myself and confirmed this by carrying out one more observation session in each ward to ensure that I had collected all the necessary data and that no new insights were revealed. This one session served as a double check and sign for me to move on.

My background of having previously worked in this setting made me more in tune with what was going on. The in-depth description in my expanded field notes, helped to draw out what was normal or not in a situation (Hymes, 1984) and enriched my data collection. This in turn helped the analysis. On the other hand, as a practitioner I sometimes took things for granted. An example of this was when I was writing my findings about asynchronous exchange of information using e-mails. Knowing from experience that e-mails were used for information exchange in this setting, I did not probe further about e-mails when conducting interviews and in a later review, could only find three examples in my data set of when professionals referred to them. This is an example where my practice knowledge went beyond my data knowledge and by discussing it here and in Section 5.3 may show that I have kept true to the data corpus.

When I commenced this study, communication by email did not feature very prominently in the running of the hospital wards in the study setting. This changed over the course of the study. When writing up my findings, I noticed that the subject of emails had only been mentioned three times in my observations and interviews. This may have been due to the way I was interviewing participants, that is, by initially posing a "grand tour question" (Spradley, 1979, p. 87) about IPC and letting the interview flow as a conversation. On reflection, I could have included a specific question on this subject, especially in light of the increasing reliance on such communication.

Role conflict may have also been carried through to when conducting analysis where I analysed data from a perspective other than that of a researcher. This is where I feel that by using Goffman's (1959) theoretical lens of scripts as a guide helped me analyse my data differently by considering all types of encounters that included all professions and invoked different categories of scriptedness. I considered that the most important issue in practitioner/researcher debate was to be 'open, authentic, honest, deeply interested in the experience of one's research participants, and committed to accurately and adequately representing their experience' (Corbin Dwyer & Buckle, 2009, p. 59). These authors advise that as researchers, we can occupy the 'space in between' the two dichotomies of being an insider or outsider (p. 61). This was also previously identified by Lofland, Snow, Anderson and Lofland (2006) who point out that a marginal position may be adopted where there is access to participants' perspective as an insider, while at the same time maintaining an outsider's stance to avoid too much *rapport*. I tried to achieve an outsider's stance when in the field, by temporarily suspending any preconceptions that may have risen from previous everyday knowledge (Hammersley & Atkinson, 2007) (Section 3.10). Indeed, I needed to work harder and move beyond what everyone else saw if I was to produce a theoretically informed, insightful write up to generate new knowledge.

Another quality of being a practitioner/researcher is the knowledge acquired for self-development. In researching IPC, I not only developed knowledge of how this setting collaborates, it also assisted me in my lecturing role teaching paediatrics. By refreshing my memory of the clinical experience, I could enhance my lectures by drawing on practical examples. But most importantly, I learnt how I could improve on my collaboration with the other professions in the faculty where I work. In my everyday work, I constantly need to collaborate not only with colleagues from my department, but also from other departments. This includes the interaction experienced during unscheduled encounters happening mostly in the corridors, staff room and offices. This is similar to the study findings. Through this experience, I hope that I have not only become a better researcher but also a better practitioner.
The next section will discuss the trustworthiness of this study which was introduced in Section 3.11.

9.9 Trustworthiness

Guba's (1985) four criteria have been used as guidelines to determine the trustworthiness of this study. These are credibility, transferability, dependability and, confirmability. Within these criteria there are methodological strategies for demonstrating quality such as: audit trail, member checks when coding, categorising, peer debriefing, negative case analysis and, prolonged engagement and persistent observation (Lincoln & Guba, 1985). These mechanisms have been woven through the whole research process to build a sound study. That is why data collection and analysis were iterative rather than linear (Section 3.8).

9.9.1 Credibility

Credibility or trueness, a term used by Lofland and colleagues (2006), refers to the "confidence in the truth of data" (Polit *et al.,* 2001, p. 312) and the whole research process which may be achieved when the research study is guided in a plausible manner and confirmed by the actions taken to demonstrate this credibility (Lincoln & Guba, 1985). Guba and Lincoln (1989) state that actions which enhance credibility include those which help ensure that the reconstructions of the realities of the researcher are in line or in close proximity with those of the participants. This is in line with the ontological stance of constructionism, discussed in Section 3.2.

Credibility may be achieved through several mechanisms throughout the research process. For example, Lincoln and Guba (1985, p. 304) state:

> If the purpose of prolonged engagement is to render the inquirer open to the multiple influences - the mutual shapers and contextual factors - that impinge upon the phenomenon being studied, the purpose of persistent observation is to identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail. If prolonged engagement provides scope, persistent observation provides depth.

By investing enough time in the field for in-depth understanding, prolonged engagement helped me to observe IPC during various encounters happening in different contexts of the wards and enacted by different professionals over a period of eighteen months. On the other hand, persistent observation was achieved by

iteratively switching between data collection and analysing data and with every subsequent observation, I could focus more on what was influencing IPC.

Another technique for enhancing credibility is triangulation and this may take several forms. Triangulation is a procedure advocated by researchers for validating observational data (Denzin, 1970; Seale, 1999). Denzin's (1978) description of triangulation outlines four types: sources of data, investigator triangulation, theory triangulation and method of data collection triangulation; the last one being the most widely applied. In this study, two of the four criteria were applied. Multiple sources of data were sought and details of this can be seen in Section 3.7.7 when discussing the sampling technique. Including as many HCPs as possible as participants during observations and interviews, was done with the intention to provide a rich set of data. Triangulation of data collection methods was achieved by a combination of ethnographic observational data and interviewing (Sections 3.7.2 and 3.7.3). By including several sources and methods, I considered myself to be in a better position to understand IPC in the study setting and triangulation provided convergence on the participants' reality.

Lincoln and Guba (1985) also suggest peer reviewing as another measure to enhance credibility. This has its uses as the reviewer may challenge the emerging data analysis and conclusions. This was mainly achieved by engaging in long discussions with my supervisor where we discussed emerging findings and any decisions taken throughout the research process. I also engaged in long discussions with my office colleague, who although not involved in the study, had enough insight into qualitative research to be able to challenge any misconceptions. Being a HCP herself, with previous clinical experience may have enhanced our conversations as she could easily relate to the topic; but, she may also have influenced our discussions through her preconceived ideas. To guard against this, I tried to give a rationale for any methodological decisions taken and always grounded my findings in the data generated.

A controversial procedure for enhancing credibility is that of member checking. Indeed, some researchers consider this measure to be crucial in achieving credibility (Lincoln & Guba, 1985). This involves "showing materials such as interview

transcripts and research reports to the people on whom the research has been done" and in return, they can agree or disagree on how the researcher has chosen to represent them (Seale, 2002, p. 104). Guba and Lincoln (1981) initially described member checks to be done continuously during data analysis. Others have interpreted this "as verification of the overall results with participants" (Morse, Barrett, Mayan, Olson, & Spiers, 2002, p. 7). Several researchers argue against this (Guba & Lincoln, 1981; Hammersley, 1992; Morse, 1998) and warn that member checks should not be used as a verification strategy. The problem with member checks arises because in most qualitative studies "study results have been synthesised, decontextualised, and abstracted from (and across) individual participants" (Morse *et al*., 2002, p. 7). Participants may not even recognise their contribution or their individual experiences in the write-up presented to them (Morse, 1998; Sandelowski, 1993).

From the time that all data was collected to the time that all data was analysed, more than eighteen months elapsed and this was partly why I decided not to return to the field with my analysed data. Some of the participants had also moved on to other wards. I was also confident that when I needed to clarify any unclear episode encountered in my fieldwork, I approached the participants after the episode through informal conversations or during the formal interviews (Sections 3.7.3 and 9.8). The following is an example from my field notes:

> *The consultant arrives and the doctor briefs him on his patients. I had decided earlier on to join the ward round today so I accompany the firm. We go to the first patient and the consultant finds out that the patient and his mother are not next to the bed and he looks rather annoyed. They are quickly called and the ward round continues. When we move to the corridor, the consultant turns to the nurse and in a rather patronising voice instructs her that the patients should stay near the bed and wait for the ward round. The nurse just looks at him and says nothing. I ask myself why the nurse did not respond and realise that there could be several reasons. I later ask her about this incident and the nurse said that in such instances it is better to say nothing, as the consultant knows that he is asking for the impossibl*e **[Field notes: Observation 35].**

The practice of searching for negative instances to challenge the emerging thesis or "contradict emerging or dominant ideas" (Seale, 1999, p. 73) is also broadly recommended (Campbell & Stanley, 2015; Clifford & Marcus, 1986; Lincoln &

Guba, 1985; Seale, 1999). These are also known as deviant cases (Becker, 2008) or disconfirming cases (Patton, 1990). This is an approach that supports multiple voices and views (Clifford & Marcus, 1986).

Disconfirming cases help in "producing more complex, holistic accounts of the multi-layered dynamics within particular social contexts" (Seale, 1999, p. 74). Disconfirming case analysis can revise, broaden or confirm the patterns emerging from data analysis (Mays & Pope, 2000). During my observations, I noted ways in which IPC was enacted. The resulting theory at that stage was that levels of IPC were being enacted during various encounters, guided by categories of scriptedness.

At key stages, I carried out systematic searches through the data to look for disconfirming instances to check and elaborate on the analyses. I studied the data set related to the constituent acts of information exchange namely, asking for information and associated responses, giving information proactively, transferring of work and escalation of care, and two-way negotiation. There were no other data left that did not fit into these categories; therefore, I was satisfied that the typology was sufficient to describe the acts. I repeated this exercise with all the other main findings, such as the asynchronous acts of IPC and the various scripted encounters.

A negative case was found when going through the data set related to ward rounds. Although ward rounds usually adopt the format of following five stages (Section 7.2), it is possible to find disconfirming cases that do not follow this pattern. These cases always involved ward rounds being led by the same consultant. This consultant started the ward round very early in the morning, even when the nurses were still receiving handover from the night shift. After informing the nurse-in-charge (not always), he would usually start the ward round on his own. He would be half-way through the number of patients when the other doctors catch up with him. He therefore does not follow the five-stage pattern that was dominant. He then usually updates the nurse-in-charge and the other doctors of the decisions and changes he has made. Although at no point in time was he putting the patient at risk by omitting care, by not following the usual metascript of the ward round, he was missing out on the benefits of IPC that encourages shared decision-making and discussing the care plan with the other professions. On checking the data corpus again for similar events,

I could not find any other examples of this way of conducting the ward round and therefore, I was satisfied with the way I had described and discussed the relevant process which applies to the ward rounds in the four wards relevant to this study.

By considering disconfirming cases, comprehensiveness of aspects of collaboration was ensured by including all forms of perspectives converging on IPC in this group so that it is made clear that the study does not represent one single 'truth' about what is happening in this group (Mays & Pope, 2000). Using the categories of scriptedness helped to find examples of the different forms IPC may reveal. Finally, other credibility measures that were taken have been woven along throughout this study, such as noticing reactivity (Section 3.7.2.1) and building in reflexivity (Section 3.10).

9.9.2 Transferability

As researchers, we are duty bound to not only provide credible research but also to research what is relevant to human concerns. This can be achieved through measures that help us to generalise from findings of particular cases to conclusions that have general relevance (Hammersley, 1992). Measures to justify the claim of transferability do not only relate to issues of sampling and design.

Providing a description of the study setting, time when conducted and the culture of the group studied (Guba & Lincoln, 1989) helps the reader to make judgments about the extent to which this work and findings might be applicable to their setting. The process of sampling and design were described in Section 3.7.7 and an audit trail was given throughout Chapter Three. The logistics and ethical concerns surrounding thick description and how I managed it in this study were given in Sections 3.9.1 to 3.9.6.

Another mechanism to enhance transferability was to do everything possible so that the setting and sample chosen were varied and had the potential to be representative of a wider population. This was achieved through theoretical sampling where an initial sample ensured that it represented a wide range of participants' behaviour and then that was extended as data was analysed and theory emerged (Mays & Pope, 2000). Eventually, the sample attempted to be a representation of the whole setting

to enable comprehensive understanding of IPC. The sample for observation included all HCPs working on the wards at the time of the study. This included four wards that were all inpatient settings, in one specialty (paediatrics), and in one hospital on one small island. It simply wasn't possible to broaden the study further. This implies that other studies are needed to replicate the work in other settings. Fourteen key informants for the interviews were chosen and interviewed after the observation sessions were completed.

I acknowledge that this study is merely a snapshot of what was happening in the field at the time the study was conducted and that the situation may have changed since then (Wolcott, 2001). For example, some of the participants have moved on to other wards and settings and new staff recruited. Electronic communication is now more advanced and widely used. One ward has adopted what they call a 'buddy system' between nurses where they work together as a pair to look after the children so that when one nurse leaves the ward, such as during their coffee break, the other 'buddy' is looking after the children allocated to the first nurse. This system was adopted to enhance the exchange of information and new instructions between the different professionals.

Ultimately, if aspects of my findings fit in contexts outside the study context and readers can identify with the situations presented, then it will have met the criterion of transferability (Hammersley, 1992).

9.9.3 Dependability

Dependability implies the capability of the study to be consistent and repeatable (Seale, 2002). This depends on the researcher providing a study record of decisions and steps taken during the research process. Guba and Lincoln (1981) propose that this may be accomplished by the nature of the study's audit-ability. Some researchers refer to dependability as external reliability and argue that steps can be taken to improve this (LeCompte & Goetz, 1982).

LeCompte and Goetz propose the following five steps:

1. A research report that identifies the status position taken by the researcher. This was tackled in the section about reflexivity (Section 3.10).
2. A report on who the participants offering the data are. This was discussed in Section 3.7.7 when discussing sampling.
3. A report on the social situations where the study was done. This was discussed in various sections, especially in Section 3.7.7.
4. A full account of the theories and ideas that informed the research, including those used for coding. This was given in Section 3.2 to 3.4.
5. To give attention to methodological reporting, including a detailed account of methods used. This was accomplished in Chapter Three.

Besides these steps, an audit trail of decisions taken during the course of the study was documented in a journal stored in the computer assisted qualitative data analysis software package (NVivo 10). A clear exposition of methods of data collection and analysis are part of the audit trail (Mays & Pope, 2000). I was able to refer to this information when I needed to reconfirm something or to determine why particular decisions had been taken during the research process, such as why I had chosen to start observation sessions in a particular ward and which topics I needed to cover in these sessions. Also, by keeping different copies of the inductive analysis within the NVivo software, I was able to keep track of how early coding and categories developed into defined concepts which helped in the writing of the analysis section.

9.9.4 Confirmability

Lincoln and Guba (1985) designed confirmability to replace the positivist criterion of objectivity - it includes the steps taken to ensure neutrality (Lincoln & Guba, 1985). Neutrality can be achieved by ensuring that interpretation of the findings is grounded in the data and, not merely relying on personal viewpoints or preferences (Korstjens & Moser, 2018). Therefore, the focus here is on the interpretation given to the data during analysis. Auditing, mentioned also in Section 9.9.3, is also beneficial in achieving confirmability as it includes the exercise of reflexivity, as well (Seale, 1999). Therefore, confirmability is interrelated to dependability issues. Auditing involves "the provision of a methodological self-critical account of how the research was done and can also involve triangulation exercises." (Seale, 1999, p.

45). Moreover, the criterion of confirmability was hopefully achieved by ensuring the other three criteria of trustworthiness (Sandelowski, 1986).

Confirmability was also enhanced in this study by ensuring that analysis was "grounded in the data" as much as possible (Lincoln & Guba, 1985, p. 323). An audit trail was provided in Chapter Three where I provided notes on the decisions made, being reflexive, how sampling was achieved, how categories emerged and how I managed my data. Nevertheless, I acknowledge that this ethnography is influenced by my own construct of this cultural group's reality.

9.10 Strengths and limitations and subsequent personal development

Strengths and limitations of the various aspects of ethnography were discussed in various sections of Chapter Three. For example when discussing participant observation in Section 3.7.2, several aspects of this method were discussed. Another example is that the advantages and disadvantages of being a practitioner/researcher were discussed in Section 9.8. These aspects and similar ones will not be repeated here. However, in this section I discuss what I consider to be the strengths of this study while at the same time, being aware that despite my efforts to be as rigorous as possible, this study has its limitations.

9.10.1 Strengths

The principal strengths of this study are mostly related to the methodological rigour applied throughout the whole study process. I did, however, follow the principles and practice recommended by Hammersley and Atkinson's (2007) writings very closely. I also drew upon other qualitative research authors, who have focused on ethnography, such as Atkinson, Coffey, Delamont, Lofland and Lofland (2007), Becker (2008), Denzin and Lincoln (2005), Hammersley (1992), and Spradley (1979; 1980).

Methodological rigour and my effort to enhance trustworthiness have already been discussed in Sections 3.11 and 9.9 which address issues related to credibility, transferability, dependability and confirmability. Inherent within these criteria,

prolonged engagement and persistent observation, as suggested by Lincoln and Guba (1985), generated a rich data corpus. The longer I stayed in the field, the more familiar participants became. This yielded richer data through observation and enabled me to reach certain conclusions during analysis. Conducting the formal interviews after persistent observation allowed me to become more familiar with the setting and participants were then more inclined to share information. Okely (2002) suggests that in ethnography it is essential to observe people and build a relationship before a detailed conversation can occur. Being a practitioner myself, may also have enhanced the data yielded although this may have had its drawbacks (Section 9.8).

Another feature that I consider to be a strength is the effort taken in the findings chapters to represent the multiple voices of participants, 'speaking' from different positions. This helped to achieve convergence on the complexity of reality of the study setting. My aim and interest in the study was not to prove a hypothesis but by looking through the lens of scripts, to understand how IPC was enacted in a paediatric setting.

Using Goffman's (1959) concept of scripts was an important aspect that helped to structure my findings and added strength to the study. Drawing on Gioia and Poole's (1984) work on scripts, I created a spectrum of scriptedness and was able to examine how collaboration was enacted in practice. Distinguishing the different encounters and examining the amount of collaboration by applying the different categories of scriptedness, allowed me to see aspects of IPC that would otherwise have remained invisible (Section 9.7). This led me to the conclusion that different professionals contribute towards IPC in ways that are different from the conventional expectations that IPC generally occurs during ward rounds and MDT meetings. This resulted from what the participants spontaneously chose to talk about when asked about IPC. Consequently, by looking at the actual collaboration among professionals, as suggested by Thannhauser, Russell-Mayhew and Scott (2010), I added to the body of knowledge about the processes of IPC, which is scarce in the literature (Careau, Vincent, & Swaine, 2014)

The subject of bilingualism in the study setting has already been discussed in Section 3.7.5. However, I would like to highlight the importance that such a research study

could only be conducted since I am bilingual in both Maltese and English and only other persons who are fluent in both languages could have carried out such research. Because of this, I could also double-check the transcripts and translations done by a professional transcriber/translator who is also fluent in the two languages. Transcripts were written and analysed in the language of the original recording so the data corpus was in either of the two languages. Data were also analysed in their original language to enhance the analysis' capability to be more true to the participant's concepts of reality. These concepts could be lost in translation because of metaphors and subtle but important language differences (Spradley, 1979; Vallance & Lee, 2005). Excerpts in Maltese used in the findings chapters were translated into English after being analysed.

9.10.2 Limitations

No matter how hard I strove to ensure trustworthiness, there were still some limitations to the study. A possible limitation was that although the study setting comprised multiple areas, they were all in one fairly small place in a single hospital. However, this enabled me to focus on the different facets of IPC with some insights of how the setting organised things differently in between wards but mostly comprising of the same contexts. For example, I could focus on how one ward regularly held multidisciplinary ward round meetings which was not a common practice for the other wards. Another example was how the three other wards held occasional MDT meetings, especially when there were chronic patient cases to discuss or when a child required long-term rehabilitation. Although I consider this ability to focus on these issues to be a strength, by the same token, having done it in one single hospital it is difficult to feel fully confident that IPC would happen the same way in many other settings. However, readers are invited to make comparisons between my findings and their experiences.

The element of thick description, so widely quoted in ethnographic work, took on a different stance in my study. Most of the issues about thick description in relation with this study have been discussed in Section 3.9.6. My intention here is not to repeat them but there are some points that I would like to highlight. Due to anonymity and confidentiality and other ethical issues, I had to refrain from providing a dense and detailed description that had no limit as often adopted by other

ethnographers (Becker, 1996). This may limit the reader when it comes to identifying similar contexts and applying the findings discussed in this study. However, while avoiding reproducing events completely, following Becker once again, I chose to select the relevant aspects of what was happening to transport my readers into the participants' world.

9.10.3 Personal development

My overall feeling of this long journey is that it has been a learning experience and one of discovery. Through my years as an academic, this exercise was the most demanding I have ever encountered. It was a revelation in perseverance and resilience, despite the various challenges presented by the study itself together with juggling work, family and other commitments. The change from a nursing practitioner/academic to becoming a novice researcher took several steps.

Although this was the second time conducting an ethnography (my first being for my MSc) this time round was on a larger scale and at PhD level and therefore had its challenges. Despite this, this experience taught me new insights and through defining the weaknesses and limitations in Sections 9.10.1 and 9.10.2, I have now reflected on what was commendable and what could have been done differently. I cannot ignore my personal growth in conducting this ethnography and the experience I gained incrementally. I could even see this in how I conducted my interviews.

The following excerpt is an example of one of my earlier interviews. The bold words are what I consider to be leading questions or statements:

> *Cons: So, I am seeing it* [IPC] *working in some specialities more than others according to ...*
>
> *Int:* ***So you would say that there are certain situations or cases that you would expect more collaboration than in other situations.***
> *Cons: Than in other situations, yes, yes, yes.*
>
> *Int: So what would be the situations where you would see collaboration at work?*
> *Cons: Where there are chronic,* [sound of a phone] *chronic diseases or chronic conditions, then the input is likely to be more.*
>
> *Int: Sort of ...*
> *Cons: Rather than, than in an acute short term, I don't know.*

Int: So where there is more long-term care.
Cons: I think more in long-term care. Again in the surgical ward, post-op recoveries, orthopaedics, there is the input from the, the, the physios again ...

Int: Physios mostly.
Cons: ... so depending . In short term care I don't know, someone coming in for, three days with a febrile URTI (upper respiratory tract infection) or whatever.

Int: ***Ah ha, the collaboration there would perhaps be between the doctor and the nurse only.***
Cons: And the nurse.

Int: You would not involve ...
Cons: It doesn't necessitate a wider ... So I believe, I strongly believe in interprofessional working but some situations necessitate it and necessitate a much wider array of professionals than other situations.
[Formal Interview: Consultant]

While listening and reflecting on the interview later on the same day, in my reflexive memo I wrote that I could identify how I was sometimes posing leading questions or uttering statements which prompted the interviewee to follow my line. This led me to be more careful in subsequent interviews and by reflecting on them, I could see that I had learnt my lesson. The following is an example of how I asked more open questions that led the interviewee to provide more information, without being prompted by me:

Int: So you have mentioned many professions. But let's refer back to the ward environment. What about the input of other healthcare providers you might encounter? Do you think they are important in the team?

Nurse: You are perhaps referring to the ward clerk, nursing assistants and the play teachers? They are important as well. Let's take, for example, the role of the teachers. They are usually involved when children are having problems at school. We even had cases where we needed to liaise with the child's school. Perhaps there was an issue with bullying and that would be one of the reasons that the child was admitted in the first place. We would involve them [the teachers]. It is not the first time we had such problems. Everyone to do his or her share of the job ... everybody is important in the team. Even the ward clerk is important. The role of the ward clerk is important because she is constantly on the ward, and she would know more things than us [nurses]
[Formal interview: Nurse]

The long time spent on analysing and writing up my findings was the most challenging time in the whole process. This involved volumes of writing (which did not always end up in the final write-up) and fond memories of long discussions with my main supervisor via skype since I conducted my study in Malta and my supervisor was in England. I hope that the iterations of these chapters have resulted in a good storyline that is clear and pleasant for the readers. The constant expert advice of my supervisor not only helped me to become more analytical, but lessons learnt helped me to become a more effective academic in my work with students by enabling them to grow academically.

Ultimately, the knowledge gained through this journey did not only comprise ethnographic insight but, more importantly, I gained knowledge about collaboration in general and the topic of IPC especially that which is enacted in a paediatric setting. The knowledge gained and the study findings should be helpful to different groups of people, such as practitioners, managers, and other researchers. The next section will address the recommendations to these different categories of people.

9.11 Recommendations for different groups of people

The success and survival of collaborations depend on the time invested in creating a "firm foundation among the participating individuals and their respective agencies" (Davoli & Fine, 2004, p. 269). In trying to answer this study's question of how IPC was enacted in this paediatric setting, several findings emerged that implied certain recommendations. The lens of scriptedness shed light on how IPC was enacted during different encounters but mainly during the unscheduled day-to-day encounters, the daily ward rounds, and the MDT meetings. These findings suggest implications for planning ways how to improve poor collaborations and encourage excellent ones. Recommendations related to the encounters whether they were backstage or frontstage will be identified in relation to management and practice, education, and research.

9.11.1 Recommendations for management and practice

On reflection about the benefits of the entire study, a pertinent message is that the study may provide an opportunity for generating a dialogue on IPC. Consequently,

contributing to the knowledge of how IPC is enacted in a paediatric setting which may lead to change in practice (Atkinson & Hammersley, 1994; Hammersley & Atkinson, 2007) and ultimately better patient care (See Chapter Two for list of benefits).

9.11.1.1 The unscheduled day-to-day encounters

The day-to-day unscheduled encounters were found to be the oil that kept the engine of IPC going (Section 8.2). In view of this, HCPs need to invest in proper time for these encounters to give them some structure with emphasis on properly documenting these encounters. Having discussed that weakly scripted encounters require more reflection (Section 9.2.1), then space and time are important aspects to support these encounters. Management needs to make these encounters more visible by acknowledging that a substantial amount of time is spent by HCPs in these kinds of collaborations. Being conducted in areas where they are most likely to be interrupted and distracted, HCPs are encouraged to conduct these encounters by moving to less busy areas, such as corridor spaces that are less disruptive or other areas such as examination/treatment rooms or a nearby office (Section 9.2.3).

On the other hand, HCPs need to respect each other not to interrupt while these encounters are in progress, unless it is an urgent matter. Findings also showed that during these encounters, repair and restart of collaborations were most likely to occur and are good reasons for supporting these unscheduled encounters. Unscheduled day-to-day encounters, guided by weak scripts, encourage more IPC and therefore need to be supported by everyone in the setting.

9.11.1.2 Ward rounds

The multi-level scripted ward rounds also provided opportunities for IPC, especially during the weakly scripted stages. If professionals look at the ward round as the five-stage process I discussed, then professionals can make better use of those stages of the ward round where it is more feasible to contribute, especially if they find it difficult or sometimes impossible to be at the patient's bedside.

Findings discussed the use of ward round checklists (Newnham *et al*., 2015; Shaughnessy & Jackson, 2015) (Section 9.4.1) that improve the efficiency of the

ward round through more participation and better documentation. I recommend that such checklists are adopted in paediatric settings considering the benefits highlighted by these researchers. This is a concept that requires commitment from all HCPs who may find resistance at first. However, once its benefits are realised, HCPs may become more supportive.

A recommendation for this setting and others in a similar practice, refers to the use of the ward-round-book. The ward-round-book mainly conveys information about the changes that were made during the ward round that are already written in the patients' notes by the doctors. I suggest that its use is discontinued as it is certainly inefficient and may pose a communication and safety risk. It makes no sense from the outside looking in, but if retained, then there needs to be a more formal upgrading to it, such as whoever enters information signs next to his/her entry.

9.11.1.3 Multi-disciplinary team meetings

MDT meetings are opportunities where a number of different professions come together to discuss patients' cases. I have already pointed out that ward round meetings are only held regularly in one of the four wards in this study, while case-conference meetings are held occasionally in all wards. A couple of interviewed participants who have experienced these meetings either in the ward where these are held regularly or perhaps in other hospitals abroad, expressed their wish that these meetings should be held in all paediatric wards. They could see the benefits the patients and staff gain from such meetings and how IPC could be enhanced through them. Therefore, the practice of holding regular MDT meetings is highly recommended as an encounter that can be implemented in all the wards.

Similar to the ward rounds, discussion revealed that more structure to the MDT meetings enhances IPC (Michan & Rodger, 2000; Tyson *et al*., 2014). Therefore, it is recommended that a structured checklist, as discussed in Section 9.4.2 by Lamb *et al* (2012), is used as this structure helps to organise elements that are essential for this meeting and ensures that the required professions are present.

9.11.1.4 Other areas

This study has shown that the nursing report plays a crucial role in the on-going action of providing patient care and is, in my opinion, being under-utilised. This may

possibly be due to the fact that nurses and other professions do not give it its due importance. Although it is known as the nurses' report, because nurses write it, it comprises information for all HCPs including doctors. It has a structured component in the form of a checklist and an area where nurses write other information, such as which other professionals have visited the patient as well as including a handover of pending work. Considering that two individual handovers are held in the morning, one by nurses for nurses and one by doctors for doctors, I suggest that future practice should consider that the two morning formal handovers be joined into one formal handover including all professions available at that time. During this handover, information related to each patient is given sequentially by a nurse and a doctor, each reading their respective report. I see potential in trying to amalgamate the two formal handovers and turning it into an IP handover meeting. This may involve negotiating the time when handover is given.

9.11.2 Recommendations for education

Providing effective, comprehensive patient care is a complex task that requires all healthcare providers to work collaboratively. However, as a result of the research reviewed, coupled with the findings of this study, it is evident that IPC can sometimes be problematic. This study analysed IPC in a particular setting through the lens of scripts. I found that different categories of scriptedness helped to deliver different kinds of collaboration. My recommendation in this section is for HCPs to receive more relevant training.

All HCPs' undergraduate curricula most likely contain attention to communication skills between professionals and patients and families and less attention is given to communication expertise from one professional to another that helps to support good quality IPC. Therefore, insights from this study about the kinds of communication that support collaboration might usefully be introduced to undergraduate curricula for HCPs. This can be done uniprofessionally, as well as interprofessionally. It does not have to be IPE. This knowledge can be introduced within profession-specific curricula where communication skills, which support collaboration, are taught. I have already started doing this in nursing undergraduate curricula. Now I recommend that other academics from other professions do the same and teach students how professionals need to communicate to support effective IPC.

I say this with caution because in a recent, local study, conceptualising the development of interprofessional healthcare education, findings revealed, "while they [healthcare professional academics] lauded the notion in principle, they identified a multiplicity of factors that would pose barriers to its enactment in practice" (Bonello, 2016). So perhaps my recommendation of uniprofessional teaching of collaborative communication will be more acceptable where this attitude exists. Indeed, "Teaching interpersonal and communication skills must touch on professionalism as it relates to interacting with colleagues and other healthcare professionals" (Balmer *et al*., 2010, p. 372). Chakraborti, Boonyasai, Wright, and Kern (2008) emphasise the interrelationship of communication and professionalism. These dimensions of teamwork are enhanced and foster trust and respect between professionals.

9.11.3 Recommendations for further research

Recommendations for future research need to include those phenomena that were not captured in this study. This study scrutinised IPC through the lens of scripts from Goffman's (1959) social dramaturgical theory and applied a spectrum of scriptedness, adapted from Gioia and Poole (1984), to the range of encounters enacted in the study setting. This helped to better understand the processes of IPC. Consequently, this study has contributed to knowledge about how IPC can be enacted. While looking for literature pertaining to scripts, I came across studies using scripts to look at various phenomena and these have already been discussed in Section 3.4.2. However, to the best of my knowledge, none focused on IPC. In the study setting, there was a spectrum of scriptedness ranging from very strong to weak scripts being invoked. If encounters were enacted for the first time, these were categorised as unscripted encounters. There were also those encounters that purposely invoked a multi-level range of scripts which I labelled as metascripts. This is how it worked in this paediatric setting; we are not sure how it works in other settings as this has not been studied yet.

While there is literature stating that IPC has not worked substantively in particular settings (Lewin & Reeves, 2011), these researchers were not looking at it through the lens I used. This signals the following recommendation that it would be worth

replicating similar studies to this study to contrast clinical areas so as to gain more insight into which of the findings were context specific and which aspects may apply across a range of contexts. The study has shown that scriptedness is quite an important feature of IPC and found that the existing literature does not address it. Therefore, more work needs to be done round scripts and IPC. Applying the lens of scriptedness when studying IPC in other contexts other than paediatrics may answer questions such as, *"Were my findings specific to being a paediatric context? And were they specific to the local culture?"* Therefore, future studies need to address both questions by conducting research in other contexts, both locally and abroad.

A phenomenon that was not scrutinised in this study is the offstage interactions during socialising activities outside the wards and its effect on IPC. Sinclair's (1997) modified front/backstage model, also used by Lewin and Reeves (2011), suggests looking at the offstage aspect and how this may impact the level of IPC. Although I did attend and observe some social activities, I did not have enough data to support examining this aspect of IPC. Therefore, future studies exploring IPC need to include the offstage aspect as findings from these studies may reveal the importance or otherwise of such activities in sustaining IPC.

This study focused on the enactment of IPC in the paediatric setting and the positive effects of IPC on patient care was not specifically inspected, as this was not part of this study. The benefits of IPC in adult settings and in other paediatric health as well as social care settings have been researched and were discussed in Chapter Three. I also mentioned that IPC in paediatric in-hospital settings has been sparsely examined. Because of my clinical background as a nurse and also due to the informal conversations with the parents of the hospitalised children during the study, I developed the opinion that when IPC was enacted, patients and parents appeared to be more satisfied with the service delivered. Thus, the benefits of IPC in paediatric wards need to be further explored including the voice of the children and their families regarding this matter.

Chapter 10 Final conclusions

This ethnographic study, utilising the lens of scripts to analyse IPC, helped me to identify, differentiate, understand and explain different forms that IPC may take. By employing these methods, this study met the objectives set out. The study objectives were: to understand the enactment of IPC through its constituent acts of information exchange; to explore the enactment of synchronous and asynchronous IPC; to determine the categories of scripts that are invoked during IPC; and to explore the relationship between scriptedness and IPC.

In order to understand how IPC was enacted in this setting, three theoretical perspectives framed my analysis and findings. The study started by thinking about Goffman's (1959) analysis of social situations, initially focusing on his dramaturgy theory. To deepen the analysis, the study began to focus on scripts as they are described by Goffman and as ideas about scriptedness have developed. The work of Gioia and Poole (1984) informed much of the subsequent analysis. Finally, insights derived through these lenses were deepened again by considering Engeström's (2008) theory of knotworking, including his activity-theoretical consideration of scripts and the purposes of collaboration. This novel juxtaposition of theoretical perspectives enabled this study to extend understanding of the enactment of interprofessional collaboration, as well as to consider the contributions and limitations of the three theoretical lenses.

Goffman's (1959) theory views life as a drama and people's behaviour as actors within that social drama: behaviour is adapted to the situation. For example, in dramaturgy theory when people have an audience they are 'frontstage' and when they don't have an audience they are 'backstage': frontstage behaviour is shaped to influence the way the audience apprehends it. When I made my ethnographic observations, I was guided by these insights to look for different kinds of IPC and in particular to look for frontstage and backstage IPC interactions.

Doing my cycles of data collection and analysis using dramaturgy theory revealed that the distinction between frontstage and backstage behaviour only takes analysis so far: it was important for guiding data collection to contrasting social situations but insufficient for the depth of analysis required to elicit new insights into IPC. However, I became more interested in the aspect of Goffman's (1959) work on dramaturgical theory which treats the idea of a script as a metaphor. Scripts seemed to offer potential for deeper analysis and understanding of IPC. For example, Vanclay and Enticott (2011) stated that script theory helps researchers understand the behaviour of individuals more effectively. Through this understanding, these authors (p. 256) suggest "that scripts have implications for policymakers and those seeking to promote practice change": which in their case involved agricultural staff and veterinarians in rural social research. In Section 3.4, I defined scripts as ingrained memories or mental models representing ways of behaving in specific situations, learnt through socialisation in a culture or subculture (Silvasti, 2003). Therefore, I searched for literature on scripts and researchers who had added to the analytical literature on scripts. Thereafter I drew predominantly on the work of Gioia and Poole (1984) for my analysis.

Gioia and Poole (1984) drew upon Goffman's dramaturgical theory and his concept of scripts when they developed their continuum of scriptedness (Figure 3.1). Gioia and Poole (p. 452) specified that participants' "understanding of what they were doing has the metaphorical character of the performance of a script for a play or a film. The script concept, therefore, operates on the basis of an encompassing metaphor: the organisation as a theatre." Scripts offer a dual role for participants. They allow the understanding of current organisational situations, and they also provide a guide to suitable behaviour. Scripts lie on a continuum and different levels of scripts are formed depending on the familiarity of the situation. Familiar situations prompt rehearsal and a degree of adaptation of a script that the actor (in this study a healthcare professional) has used before with reasonable success in the same or a somewhat similar situation. Repeated rehearsal and refinement strengthens and embeds the script, resulting in a strong script which, to a large extent, can be used automatically when the familiar situation arises. Learning, using and refining scripts is an important part of social interaction. However, when a

completely new situation is encountered or a problem needs solving and there is no script for it, participants go back to an unscripted situation and active thought processing.

My analysis began to explore IPC through the lens of scriptedness, initially applying Gioia and Poole's (1984) work on processes and categories of scripts to my ethnographic data. As my understanding developed, I adapted the Gioia and Poole model (Figure 3.1) according to my own findings. I identified categories of scriptedness and found that my observations ranged across a narrower band of scriptedness (Figure 6.1) than that developed by Gioia and Poole. This lens of scriptedness helped me to unpick the meanings of the ethnographic observations and structure my findings.

Thus, drawing on Goffman's (1959) and Gioia and Poole's (1984) theories, findings became clearer. A major finding in my thesis is that the **ward round is essentially a drama in five acts** (See Sections 7.2 and 9.4.1), where in each of the acts the level of **scriptedness** is different: the variation in level of scriptedness allows different processes to happen. The five acts of the ward round drama have different purposes and different people participating. This study has shown that the interprofessional ward round achieves its clinical and collaborative purposes, not through a uniform script but through phases. These phases and levels of scriptedness go up or down to provide efficiency within routine contributions and to facilitate more collaboration and problem solving at other phases. This thesis argues that the ward round is guided by **a metascript** (See Section 9.4.1).

The insight that different things happened during phases of the ward round metascript with different levels of scriptedness led me to think more deeply about the purposes of the ward round's five acts and the different levels of scriptedness which were invoked. This extended to wider consideration of the *purposes* of different levels of scriptedness and prompted wider reading, since Gioia and Poole's (1984) theory focusing on *processes* did not help me in finding the different *purposes* of these interactions. This thesis then makes a novel contribution by bringing together the analytical lenses of Gioia and Poole's work on scriptedness (which built upon Goffman's work on scripts) with Engeström's (2008) theory of **knotworking**,

including his activity-theoretical consideration of scripts and the purposes of collaboration.

This study and the wider literature identify that **strong scripts** are usually invoked when encounters have become routinized and when professionals need to work **quickly and efficiently.** Engeström (2008, p. 67) explains, this is because "Scripts evolve historically to codify and regulate standard procedures in repeatedly occurring cultural situations." However, Gioia and Poole (1984, p.452) argue that accelerated decision-making may not necessarily result in good decision making because "the process of deciding is based on a protoscript, rather than a step-by-step accounting of the uniqueness of events relevant to the present situation." On the other hand, weak scripts allow more time for reflection and interaction because "performances are not always spontaneously or unconsciously executed. Rather, people have the ability to stand back and look at what they are doing." (Gioia & Poole, p. 452).

The findings of my study began to show very clearly **the key role of weak scripts,** especially guiding the unscheduled day-to-day interactions and collaboration. A substantial amount of work was achieved in this IP team through unscheduled day-to-day interactions. Here I will reiterate (See Section 2.3.1), that despite being important, the literature has not really focused on these informal, backstage interactions. Engeström's (2008) work on knotworking proved to be a useful way to examine more closely the purposes of weakly scripted encounters. Drawing on the work by Raeithel (1983) and Fichtner (1984) on subject-object-subject relations, Engeström (2008) interpreted three developmental types of combining the instrumental and communicative aspects of activity: coordination, cooperation, and reflective communication. These three types helped me to understand the purposes of weak scripts and the different ways in which weakly scripted encounters support IPC. This analysis also revealed variation in the level of scriptedness, even within weakly scripted encounters. Arguably, this supports Gioia and Poole's (1984) conceptualisation of scriptedness as a *continuum.*

The first, **coordination,** is "the normal scripted flow of interaction" (Engeström, 2008, p. 50). Different actors follow their scripted roles, each focused on the

successful performance of the assigned actions. The script, embedded within them, coordinates their actions unconsciously, without being questioned or discussed. Through coordination, over time, people can develop protoscripts, so HCPs can have unplanned interprofessional interactions which coordinate their interprofessional work and that eventually develop into a routine or a protoscript. This research study found examples of this, such as when HCPs seek information as in Section 4.2, Excerpt 3 when a HCP was seeking information from the nurse and doctor to see how to proceed with her work.

The second type of collaboration, **cooperation,** involves " modes of interaction in which the actors, instead of focusing on performing their assigned roles or presenting themselves, focus on a shared problem, trying to find mutually acceptable ways to conceptualise and solve it." (Engeström, 2008, p. 51). The actors go beyond the boundaries of what is expected of them, but without openly "questioning or reconceptualising the scripts." In certain collaborative interactions, HCPs probably had a script because they had experienced similar situations before. Therefore, it might have been unscheduled collaboration but it wasn't the weakest of scripts. An example of this is in Section 4.3, Excerpt 5, when the nurse indicated that the patient needed analgesia and subtly hinted that the doctor needed to prescribe treatment.

The third is **reflective communication,** referring to the interactions "in which the actors focus on reconceptualising their own organisation and interaction in relation to their shared objects. Both the object and the script are reconceptualised, as is the interaction between the participants." (Engeström, 2008, p. 51). In the unplanned day-to-day work, some aspects are more complex and the lens of scriptedness helps to understand the types of IPC that ensue, including some that have quite strong protoscripts. Such an example is when HCPs have a situation where they do not know what to do, such as when the nurse and doctor were discussing a child who had respiratory distress (Section 4.3, Excerpt 2). Of necessity this IPC is about collaborative problem solving and is achieved through a weak script that requires active thought processing from each participant. The greater the need to problem-solve, the higher the level of Engeström's typology of knotworking is brought into action and the more reflection is needed. Problem solving is complex, needing weak scripts and the associated active processing. When people are problem solving via

weak scripts they have more opportunity to reflect on their actions and this where I referred to Schön's (1984) work on reflection-in-action (Section 9.2.1).

Adding Engeström's (2008) theory to Goffman's (1959) and Gioia and Poole's (1984), gave me analytical purchase and helped to achieve a deeper understanding of IPC in the study setting. I could do this because these scripts were being performed in knots of activity. All three types of collaboration were observed during weakly scripted encounters. Most of the time people were achieving their shared work through unscheduled interactions guided by weak scripts. But as HCP's move up through levels of increasing complexity, they need an even weaker script in order to deal with that complexity. This can move near to an unscripted interaction, although more likely experienced professionals will draw upon fragments of potentially relevant scripts from elsewhere in their experience to date.

This study found another purpose requiring Engeström's third category of purpose for weakly scripted knots (reflective communication), which was when **collaboration needed repairing** or a collaboration that was stalled needed to be restarted. Repairing, like problem solving, is something that needs to be done very frequently in healthcare workplaces. In this study, when IPC broke down or stalled, mainly during formal, more strongly scripted interactions, professionals usually looked for an opportunity to repair this collaboration in a weakly scripted encounter within which professionals were more eager to reflect and interact (See Section 8.3.1, Excerpt 2).

Although the study focused mainly on face-to-face synchronous IPC, the central part that asynchronous IPC plays cannot be left out (See Chapter Five and Section 9.5). Indeed, synchronous and asynchronous IPC complement and support each other and the same theoretical lenses of scriptedness and the purposes of collaboration can be applied. Important information is conveyed for asynchronous IPC through records and messages (e.g. requests and outcomes), with the advantage that professionals can access these when convenient, provided matters are not urgent. Asynchronous IPC can be strongly scripted through the influence of forms and protocols, although these may contain free-text elements which reduce the level of scriptedness.

Asynchronous IPC can also be weakly scripted, such as through the mediums of clinical notes, or emails and other messages between different professionals. Much of this IPC can be characterised as cooperation (Engeström, 2008) and this study also found examples of collaboration, particularly when asynchronous IPC had stalled in some way, or the acuity of a situation had increased (see examples in Chapter 5). Examples include coordinating and cooperating by sharing laboratory results or any other results. HCPs cooperate asynchronously especially through the nurses' reports and doctors' notes. HCPs may also communicate reflectively and asynchronously especially when they communicate through emails to problem solve a case that is not urgent.

Therefore, each of the three theories, Goffman (1959), Gioia and Poole (1984), and Engeström (2008) were pivotal to my analysis and findings and recommendations. By focusing a substantial part of my thesis on the weakly scripted interactions, and using Engeström's typology, I have added a new level of insight into weak scripts and therefore added to knowledge about the purposes and range of weakly scripted encounters.

After reviewing the key findings and providing the insights etched in this study, the basic core attributes of IPC are worth remembering through the following interview excerpt,

> *What makes it [IPC] work I think. Clear communication so that I like you know, we say what we ... and trust ultimately actually I think this is very important. Trust and respect for each other. So, I trust you and I respect your opinion, you are coming from that field and I am coming from this field. It doesn't mean I am better than you or you are better than me. No, we trust and respect each other. We communicate clearly with each other. And then we acknowledge that ... but someone in different situations must take the lead. (...) I am a member of the team but I have to acknowledge that sometimes, not I, on my own take the decisions. The team takes them and sometimes it is the social workers who have to take the lead on a case because there is much more of the social situation that needed investigations whereas at other times, (...) I will take the lead. So we trust and respect each other and acknowledge where at times you are going to take the lead and at times, I am going to take the lead.*
> **[Formal Interview: Consultant]**

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APPENDICES

Appendix 1: List of studies retained from the initial literature searches

(Step One and Two: Section 2.2.2.1 and 2.2.2.2)

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Appendix 2: CASP Tool

Revised el 2009
Interprofessional interaction, negotiation and
non negotiation on general internal medicine
wards.
(JIC 2009, 23(6):633-645).

Critical Appraisal Skills Programme (CASP)

making sense of evidence

10 questions to help you make sense of qualitative research

This assessment tool has been developed for those unfamiliar with qualitative research and its theoretical perspectives. This tool presents a number of questions that deal very broadly with some of the principles or assumptions that characterise qualitative research. It is *not a definitive guide* and extensive further reading is recommended.

How to use this appraisal tool

Three broad issues need to be considered when appraising the report of qualitative research:

- **Rigour: has a thorough and appropriate approach been applied to**
- **key research methods in the study?**
- **Credibility: are the findings well presented and meaningful?**
- **Relevance: how useful are the findings to you and your organisation?**

The 10 questions on the following pages are designed to help you think about these issues systematically.

The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions.

A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

The 10 questions have been developed by the national CASP collaboration for qualitative methodologies

Screening Questions

1. Was there a clear statement of the aims of the research? ☑ Yes ☐ No

Consider:

- *what the goal of the research was* → to explore the nature of interprofessional interaction.
- *why it is important* – IPC improves quality in healthcare.
- *its relevance* – healthcare is becoming more complex and thus IPC is needed.

2. Is a qualitative methodology appropriate? ☑ Yes ☐ No

Consider:

- *if the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants*

Interpretation of data was illuminated by Strauss' (1978) negotiated order Theory.

Is it worth continuing? yes.

Detailed questions

Appropriate research design

3. Was the research design appropriate to address the aims of the research?

Write comments here

Consider:

- *if the researcher has justified the research design (e.g. have they discussed how they decided which methods to use?)*

Interactions are best observed
Previous studies relied on interviews.

Sampling

4. Was the recruitment strategy appropriate to the aims of the research?

Write comments here

Consider:

- *if the researcher has explained how the participants were selected* X
- *if they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study* ✓
- *if there are any discussions around recruitment (e.g. why some people chose not to take part)* X

observations were done at different times & the day so a wide range of interactions were observed.
47 interviews (formal) various professions & various positions.
Did not include how they were chosen
Did not include if anyone refused to participate.

Data collection

5. Were the data collected in a way that addressed the research issue?

Write comments here

Consider:

- *if the setting for data collection was justified* ✓
- *if it is clear how data were collected (e.g. focus group, semi-structured interview etc)* ✓
- *if the researcher has justified the methods chosen* ✓
- *if the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, did they used a topic guide?)* ✓
- *if methods were modified during the study. If so, has the researcher explained how and why?* ✗
- *if the form of data is clear (e.g. tape recordings, video material, notes etc)* ✓
- *if the researcher has discussed saturation of data* ✓

Setting was justified
Data were collected through observation informal interviews / semi-structured interviews & used observations to clarify the observations.
Formal interviews were conducted to gain understandings & views as well as elicit information on PC ~~allowed~~ allowed flexibility.
Semi-structured
field notes.
all researchers agreed that enough data were gathered.

Reflexivity (research partnership relations/recognition of researcher bias)

6. Has the relationship between researcher and participants been adequately considered?

Write comments here

Consider whether it is clear:

- *if the researcher critically examined their own role, potential bias and influence during:* ✓
  - *formulation of research questions*
  - *data collection, including sample recruitment and choice of location*
- *how the researcher responded to events during the study and whether they considered the implications of any changes in the research design*

None of the researchers were visited in their own practice.
Participants found they were aware of researcher reflexivity.
Mixed & marginal participation.
None mentioned.

Ethical Issues

7. Have ethical issues been taken into consideration?

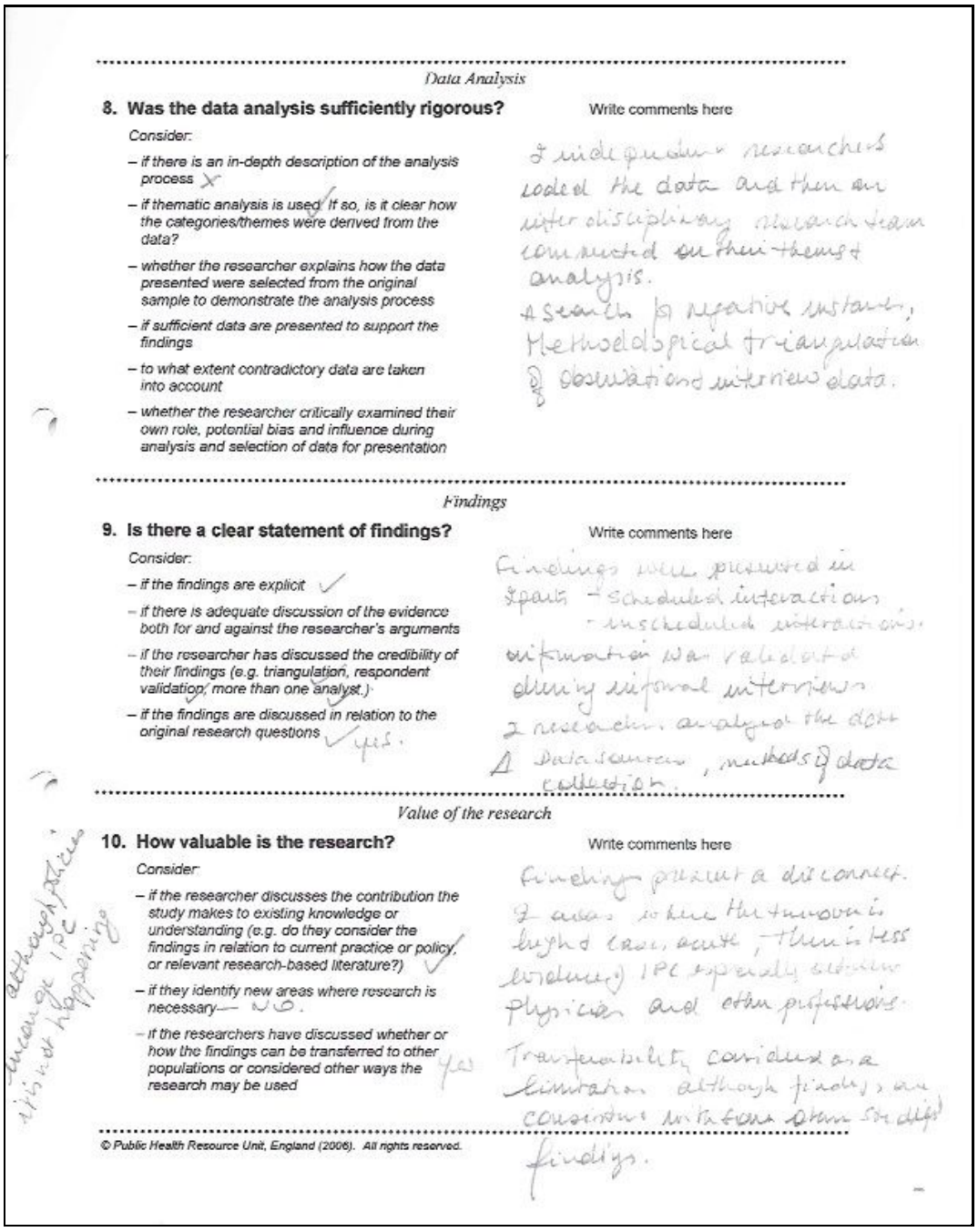
Write comments here

Consider:

- *if there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained* ✗
- *if the researcher has discussed issues raised by the study (e. g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)* ✓ ✗
- *if approval has been sought from the ethics committee* ✓

Not clear
Avoided patient data & observation.
Ethical approval.

Verbal Consent for observation
Written Consent for formal interviews.



Data Analysis

8. Was the data analysis sufficiently rigorous?

Write comments here

Consider:

- *if there is an in-depth description of the analysis process*
- *if thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?*
- *whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process*
- *if sufficient data are presented to support the findings*
- *to what extent contradictory data are taken into account*
- *whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation*

2 independent researchers coded the data and then an inter disciplinary research team contributed on their themes + analysis.

+ search for negative instances, Methodological triangulation & observation and interview data.

Findings

9. Is there a clear statement of findings?

Write comments here

Consider:

- *if the findings are explicit*
- *if there is adequate discussion of the evidence both for and against the researcher's arguments*
- *if the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst.)*
- *if the findings are discussed in relation to the original research questions*

Findings were presented in 3 parts - scheduled interactions - unscheduled interactions. information was validated during informal interviews 2 researchers analysed the data

4 Data sources, methods of data collection.

Value of the research

10. How valuable is the research?

Write comments here

Consider:

- *if the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature?)*
- *if they identify new areas where research is necessary*
- *if the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used*

although aware of IPC issues not happening

Findings present a discomfort. 2 areas where turnover is high (case, acute, thus is less evidence) IPC especially evidence physician and other professions.

Transferability considered as a limitation although findings are consistent with literature from similar findings.

Appendix 3: Permission to reproduce Figure 3.1: A continuum of script development

Irina Burns<iburns@aom.org>

Thu, 26 May 2016, 15:14

to me

Dear Anna,

Please consider this email a permission to reproduce in your dissertation the following figure:

Gioia, D.A., & Poole, P.P. (1984), Scripts in Organisational Behaviour.

The Academy of Management Review, Vol.9. (3) pp.449-459.

You do not need to contact Copyright Clearance Center.

Best,

Irina

Irina Burns
Managing Editor and Publishing Services Specialist
Academy of Management
235 Elm Rd PO Box 3020
Briarcliff Manor, NY 10510-8020
Phone: (914) 923-2984
Email: iburns@aom.org
Website: aom.org

Appendix 4: Interview guide

[There are six main questions.
The rest are prompts to help me along and keeps the conversation flowing.]

Introduction

You know I've been observing on the ward because I am quite interested in how different people on the ward collaborate with one another. I just wondered if you could tell me how you feel about collaboration on the ward.

1. In your clinical experience, to what extent do you think interprofessional collaboration is happening in this ward?
(If they talk about intra-professional collaboration then I would guide them slowly into inter-professional collaboration by posing the next question).

2. Well how about collaboration with the other professions?
(Where? When? And with whom? What about before, during and after the ward rounds?)

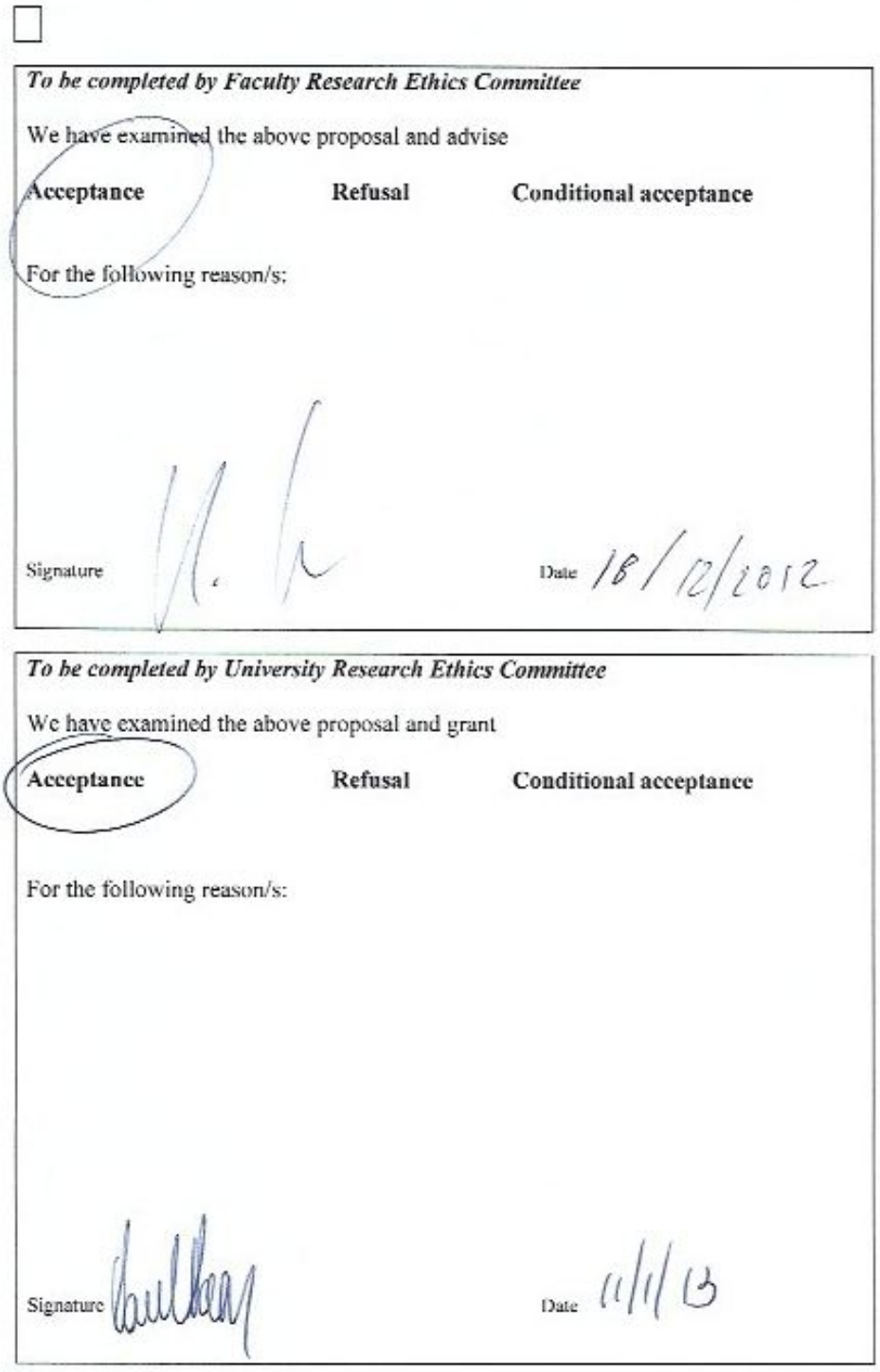
3. Who do you think contributes towards the care of the child?
(The ward clerk? The nursing assistants? The play teachers? etc.)
When they talk about who is involved the next question may be posed

4. Is anybody not involved in IPC and who you think should be?
Sometimes collaboration goes really well and sometimes it doesn't go so well.

5. Do you have any thoughts on what sort of factors make it go well and what makes it not go so well?
(What is IPC like when it is going really well?
What will it take to go really well and to make it go really well all the time?)

6. Can you think of a situation when you could say that you experienced IPC? What were your feelings?

Appendix 5: Permission Page and letter from FREC and UREC



To be completed by Faculty Research Ethics Committee

We have examined the above proposal and advise

Acceptance **Refusal** **Conditional acceptance**

For the following reason/s:

Signature

Date 18/12/2012

To be completed by University Research Ethics Committee

We have examined the above proposal and grant

Acceptance **Refusal** **Conditional acceptance**

For the following reason/s:

Signature

Date 11/1/13

L-UNIVERSITÀ TA' MALTA
Msida - Malta
KUMITAT TA' L-UNIVERSITA'
GHALL-ETIKA FIR-RIĊERKA

UNIVERSITY OF MALTA
Msida - Malta
UNIVERSITY RESEARCH
ETHICS COMMITTEE

28th January 2013.

Ms Anne Cini
55 Iz-Zahrija
Antonio Falzon Street
Mellieha MLH 2420

Dear Ms Cini,

I am pleased to inform you that UREC has approved your request to carry out your research: Interprofessional Collaboration in a Maltese Paediatric Setting.

Yours sincerely,

Rev Paul Pace
Chairperson
University Research Ethics Committee

TEL: (356) 2340 2810 FAX: (356) 2340 2810 WEBSITE: http://home.um.edu.mt/urec E-MAIL: urec@um.edu.mt

Appendix 6: Approval from the Chairman of Paeditarics

Anne Cini

Iż-Żahrija, 55, A. Falzon Street,

Mellieħa, MLH2420

25th September, 2012.

Prof. S. Attard Montalto

Chairman of Paediatrics

Msida, MSD 2090,

Dear Prof. Attard Montalto,

Re: Permission to conduct study

I am a PhD student reading for my degree at the Queen Mary University of London (QMUL) under the supervision of Prof. D. Freeth. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, including The study is an Ethnographic approach and therefore involves participant observation in the mentioned wards. Provided that permission is granted from the Ethics board of both the University of Malta and QMUL, as well as from the Hospital Data Protection officer and the Chief Executive Officer, this involves observing professionals in their daily interactions between themselves and with their patients and parents. The study will also involve looking at documents where different professions communicate with each other. I may also need to take photographs of the ward layout which will be pertinent to my study.

The visuals gathered will only be used for the purpose of the analysis of the study. I would also be securing confidentiality in the information gathered during observations, as the names of the participants will not be revealed. On finalising the thesis, a copy will be available for your perusal.

I would be grateful if I am granted permission to carry out fieldwork intermittently during 2013-2014. I thank you in advance for your support and assistance.

Sincerely

Anne Cini

To whom it may concern.
I totally support this
initiative.
Prof. S. Attard Montalto
26/9/12

Appendix 7 : Approval from the hospital CEO

Current Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: Research study
From: "Caruana Joseph O at ***"
Date: Wed, October 10, 2012 6:17 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file | Add to Address Book

I grant you permission to proceed.

Joseph Caruana
CEO, ***

-----Original Message-----
From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: 10 October 2012 10:44
To: Caruana Joseph O at ***
Subject: Research study

Dear Mr Caruana
I am a PhD student reading for my degree at the Queen Mary University of
London. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, including
***, ***, *** and *** ward. The study is an Ethnographic approach and therefore involves participant observation in
the mentioned wards. Permission has already been endorsed by the Chairman
of Paediatrics Prof. S. Attard Montalto and the N.O.s of the respective
wards(Please see attached zipped file).Provided that permission is granted
from the Ethics board and the Data Protection office, this involves
observing professionals in their daily interactions between them and
with
their patients and parents. The study will also involve looking at documents where different professions communicate with each other. I
will
also need to take photographs of the ward layout which will be pertinent
to my study.Such pictures will not include patients, families or staff.
The visuals gathered will only be used for the purpose of the analysis

Appendix 8: Approval from the Data Protection Officer

Current Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: Study "Interprofessional Collaboration in a Maltese Paediatric Setting"
From: "Data Protection"
Date: Wed, October 24, 2012 3:55 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

24th October 2012

Dear Ms. Cini,

With reference to the above-named study, this is to confirm that, on the basis of
the documentation you submitted, from the *** data protection point of view you have
been cleared to proceed with your study.

You are requested to submit a copy of your findings to this office at the end of
your study.

Please remember that in no way should you retain any personal details you obtain
from your research and this should be destroyed at the end of your study and you
should abide to the provisions of the Data Protection Act at all times.

Good luck with your study.

Kind regards,

Michael Gonzi
Data Protection Officer,

Tel: (+356)
Email: datapro

Appendix 9: Approval from the Contracts Manager

Current Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: FW: permission
From: "Delicata Joseph"
Date: Wed, October 31, 2012 11:36 am
To: anne.cini@um.edu.mt
Cc: "Attard Charmaine"
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file | Add to Address Book

Dear Ms Cini

Good morning

You have already got permission from the CEO, Chairman Paediatrics,
Nursing Officers of the respective wards etc, thus I certainly do not
find a nay objection from my end.

Regards

Josef Delicata

Manager Contracts

-----Original Message-----
From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: 19 October 2012 15:50
To: Delicata Joseph
Subject: permission

Dear Mr Delicata,

I am an assistant lecturer at the Faculty of Health Sciences and currently

a PhD student reading for my degree at the Queen Mary University

Appendix 10: Approvals from the Wards' Nursing Managers (4)

Anne Cini
Iż-Żahrija,
55, A. Falzon Street,
Mellieħa, MLH2420
26th September, 2012.

Mr R. Borg
NO,

MSD2090

Dear Mr Borg,

Re: Permission to conduct study

I am a PhD student reading for my degree at the Queen Mary University of London. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, and your ward has been chosen to participate in the study. Fieldwork will be conducted intermittently during 2013-2014. The study is an Ethnographic approach and therefore involves participant observation. Permission has already been granted by Prof. S. Attard Montalto, Chairman of Paediatrics. Provided that permission is granted from the Ethics board of the University of Malta, and the CEO and Data Protection officer in , this involves observing professionals in their daily interactions between themselves and with their patients and parents. The study will also involve looking at documents where different professions communicate with each other. I will also need to take photographs of the ward layout which will be pertinent to my study.

The visuals gathered will only be used for the purpose of the analysis of the study. I would also be securing confidentiality in the information gathered during observations, as the names of the participants will not be revealed. On finalising the thesis, a copy will be available for your perusal.

I would be grateful if I am granted permission to carry out fieldwork in your ward. I thank you in advance for your support and assistance.

Sincerely
Cini
Anne Cini

It is okay from my side as regards. Photographs even of the ward the proper permits have to be obtained and seen by myself.
Regard 26/9/12
Ronald N.O Borg.

RONALD BORG
NO
25454910

Anne Cini

Iż-Żahrija,

55, A. Falzon Street,

Mellieħa, MLH2420

26th September, 2012.

Ms C. Mangion

NO,

MSD2090

Dear Ms Mangion,

Re: Permission to conduct study

I am a PhD student reading for my degree at the Queen Mary University of London. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, and your ward has been chosen to participate in the study. Fieldwork will be conducted intermittently during 2013-2014. The study is an Ethnographic approach and therefore involves participant observation. Permission has already been granted by Prof. S. Attard Montalto, Chairman of Paediatrics. Provided that permission is granted from the Ethics board of the University of Malta, and the CEO and Data Protection officer in Hospital, this involves observing professionals in their daily interactions between themselves and with their patients and parents. The study will also involve looking at documents where different professions communicate with each other. I will also need to take photographs of the ward layout which will be pertinent to my study.

The visuals gathered will only be used for the purpose of the analysis of the study. I would also be securing confidentiality in the information gathered during observations, as the names of the participants will not be revealed. On finalising the thesis, a copy will be available for your perusal.

I would be grateful if I am granted permission to carry out fieldwork in your ward. I thank you in advance for your support and assistance.

Sincerely

Cini

Anne Cini

Permission granted
You are welcome to conduct your study in our ward

CMangion

Anne Cini
Iż-Żahrija,
55, A. Falzon Street,
Mellieħa, MLH2420
26th September, 2012.

Ms R. Allen
NO,

Dear Ms Allen,

Re: Permission to conduct study

I am a PhD student reading for my degree at the Queen Mary University of London. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, and your ward has been chosen to participate in the study. Fieldwork will be conducted intermittently during 2013-2014. The study is an Ethnographic approach and therefore involves participant observation. Permission has already been granted by Prof. S. Attard Montalto, Chairman of Paediatrics. Provided that permission is granted from the Ethics board of the University of Malta, and the CEO and Data Protection officer in Hospital, this involves observing professionals in their daily interactions between themselves and with their patients and parents. The study will also involve looking at documents where different professions communicate with each other. I will also need to take photographs of the ward layout which will be pertinent to my study.

The visuals gathered will only be used for the purpose of the analysis of the study. I would also be securing confidentiality in the information gathered during observations, as the names of the participants will not be revealed. On finalising the thesis, a copy will be available for your perusal.

I would be grateful if I am granted permission to carry out fieldwork in your ward. I thank you in advance for your support and assistance.

Sincerely

Cini

Anne Cini

It would be a pleasure to participate in this study.

Allen (R. ALLEN) N.O.

Anne Cini

Iż-Żahrija,

55, A. Falzon Street,

Mellieha, MLH2420

26th September, 2012.

Mr G. Debono

NO, Fairyland Ward

Mater Dei Hospital,

MSD2090

Dear Mr Debono,

Re: Permission to conduct study

I am a PhD student reading for my degree at the Queen Mary University of London. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, and your ward has been chosen to participate in the study. Fieldwork will be conducted intermittently during 2013-2014. The study is an Ethnographic approach and therefore involves participant observation. Permission has already been granted by Prof. S. Attard Montalto, Chairman of Paediatrics. Provided that permission is granted from the Ethics board of the University of Malta, and the CEO and Data Protection officer in Mater Dei Hospital, this involves observing professionals in their daily interactions between themselves and with their patients and parents. The study will also involve looking at documents where different professions communicate with each other. I will also need to take photographs of the ward layout which will be pertinent to my study.

The visuals gathered will only be used for the purpose of the analysis of the study. I would also be securing confidentiality in the information gathered during observations, as the names of the participants will not be revealed. On finalising the thesis, a copy will be available for your perusal.

I would be grateful if I am granted permission to carry out fieldwork in your ward. I thank you in advance for your support and assistance.

Sincerely

Cini

Anne Cini

No Objections

Mr Geprylle Debono
Nursing Officer
Fairyland
Mater Dei Hospital

Appendix 11: Approvals from the ten consultants

IT Services Webmail

Current Folder: **Sent**

Anne C Cini | Staff |

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Message List | Delete | Edit Message as New

Previous | Next

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Subject: permission for research study
From: "ANNE C CINI" <anne.cini@um.edu.mt>
Date: Thu, October 18, 2012 12:36 pm
To: john.a.cauchi
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Dear Mr Cauchi,
I am an assistant lecturer at the Faculty of Health Sciences and currently a PhD student reading for my degree at the Queen Mary University of London, under the supervision of Professor D. Freeth. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting, including and ward. The study is an Ethnographic approach and therefore involves participant observation in the mentioned wards. Permission has already been endorsed by the Chairman of Paediatrics Professor S. Attard Montalto. Provided that permission is granted from UREC and the data protection office,this involves me observing professionals in their daily interactions
between them and with their patients and families. I may also need to informally interview participants during the course of observation. Such conversations may be audio-taped if the participants consent and privacy is ensured. These will be more like conversations to clarify issues that may arise. The study will also involve looking at documents where different professions communicate with each other. I may also need to take photographs of the ward layout which will be pertinent to my study. Such pictures will not include patients, families or staff. The visuals gathered will only be used for the purpose of the analysis of the study.
I would also be securing confidentiality in the information gathered during observations, as the names of the participants will not be revealed. All fieldnotes will be stored in a password protected PC and any raw data will be destroyed once the thesis is completed. I also promise to uphold all regulations set by the Data Protection Act.
On finalising the thesis, I intend to offer a copy for the wards' perusal.
I would be grateful if I am granted permission to carry out fieldwork intermittently during 2013-2014.
I thank you in advance for your support and assistance.

Sincerely

Anne Cini M.Sc
Department of Nursing
Faculty of Health Science
University of Malta
Msida
MSD 2080
Malta

Tel: (+356) 2340 1839

Current Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: permission for research study
From: "Fearne Christopher"
Date: Fri, October 19, 2012 9:46 am
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

permission for research study

Dear Ms Cini,
I would be happy to help in any way possible with your research.
Chris Fearne
Paediatric Surgery

From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: Thu 18/10/2012 13:34
To: Fearne Christopher
Subject: permission for research study

Dear Mr Fearne,
I am an assistant lecturer at the Faculty of Health Sciences and currently
a PhD student reading for my degree at the Queen Mary University of
London, under the supervision of Professor D. Freeth. I would like to
conduct a research study regarding Interprofessional Collaboration in the
paediatric setting, including ***, ***, *** and
*** ward. The study is an Ethnographic approach and therefore involves
participant observation in the mentioned wards. Permission has already
been endorsed by the Chairman of Paediatrics Professor S. Attard Montalto.
Provided that permission is granted from UREC and the data protection
office,this involves me observing professionals in their daily interactions
between them and with their patients and families. I may also need to

Current Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: permission for research study
From: "Calvagna Victor"
Date: Thu, October 18, 2012 12:58 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Go ahead

Dr Victor Calvagna

Consultant Paediatric Oncologist

Tel: +35625454913
Mobile: +35679423879

email: victor.calvagna

-----Original Message-----
From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: 18 October 2012 13:32
To: Calvagna Victor
Subject: permission for research study

Dear Dr Calvagna,
I am an assistant lecturer at the Faculty of Health Sciences and currently
a PhD student reading for my degree at the Queen Mary University of
London, under the supervision of Professor D. Freeth. I would like to
conduct a research study regarding Interprofessional Collaboration in the
paediatric setting, including ***, ***, *** and
*** ward. The study is an Ethnographic approach and therefore involves
participant observation in the mentioned wards. Permission has already
been endorsed by the Chairman of Paediatrics Professor S. Attard Montalto.
Provided that permission is granted from UREC and the data protection
office,this involves me observing professionals in their daily interactions
between them and with their patients and families. I may also need to
informally interview participants during the course of

Current Folder: **Ethics PhD**

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Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: permission for research study
From: "Grech Victor E"
Date: Thu, October 18, 2012 1:55 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt> (more)
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

permission for research study

Yes of course!
Good luck.
Vic

From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: Thu 18/10/2012 13:27
To: Grech Victor E
Subject: permission for research study

Dear Professor Grech,
I am an assistant lecturer at the Faculty of Health Sciences and currently
a PhD student reading for my degree at the Queen Mary University of
London, under the supervision of Professor D. Freeth. I would like to
conduct a research study regarding Interprofessional Collaboration in the
paediatric setting, including ***, ***, *** and
*** ward. The study is an Ethnographic approach and therefore involves
participant observation in the mentioned wards. Permission has already
been endorsed by the Chairman of Paediatrics Professor S. Attard Montalto.
Provided that permission is granted from UREC and the data protection
office,this involves me observing professionals in their daily interactions
between them and with their patients and families. I may also need to
informally interview participants during the course of

Current Folder: **INBOX**

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Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: [Fwd: permission for research study]
From: "Attard Thomas M"
Date: Thu, November 1, 2012 12:37 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Thanks, I agree to participate, Regards, Tom

-----Original Message-----
From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: 01 November 2012 12:35
To: Attard Thomas M
Subject: [Fwd: permission for research study]

Resent as promised,
Regards
Anna

---------- Original Message ----------
Subject: [Fwd: permission for research study]
From: "ANNE C CINI" <anne.cini@um.edu.mt>
Date: Fri, October 26, 2012 9:12 am
To: thomas.m.attard

--

Dear Professor Attard
I am resending the email below just in case you missed it last week.
Regards
Anna

---------- Original Message ----------
Subject: permission for research study
From: "ANNE C CINI" <anne.cini@um.edu.mt>
Date: Thu, October 18, 2012 1:25 pm
To: thomas.m.attard

--

Dear Professor Attard,
I am an assistant lecturer at the Faculty of Health Sciences and currently
a PhD student reading for my degree at the Queen Mary University of London, under the supervision of Professor D. Freeth. I would like to conduct a research study regarding Interprofessional Collaboration in the

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Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: permission for research study
From: "Soler Doriette M"
Date: Thu, October 18, 2012 2:59 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

RE: permission for research study

Dear Anna

I have no objection for your field work.I wish you the best of luck and let me know
if you would need any help

Regards

Doriette Soler

Consultant Paediatric Neurologist

Malta

-----Original Message-----

From: ANNE C CINI [mailto:anne.cini@um.edu.mt]

Sent: Thu 10/18/2012 1:21 PM

To: Soler Doriette M

Subject: permission for research study

Current Folder: **Ethics PhD**

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Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: Permission for Research study
From: "Vella Cecil"
Date: Thu, October 18, 2012 1:28 pm
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Permission for Research study

Permission granted from my end.
Cecil Vella

From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: Thu 18/10/2012 1:18 PM
To: Vella Cecil
Subject: Permission for Research study

Dear Dr Vella
I am an assistant lecturer at the Faculty of Health Sciences and currently
a PhD student reading for my degree at the Queen Mary University of
London, under the supervision of Professor D. Freeth. I would like to
conduct a research study regarding Interprofessional Collaboration in the
paediatric setting, including ***, ***, *** and
*** ward. The study is an Ethnographic approach and therefore involves
participant observation in the mentioned wards. Permission has already
been endorsed by the Chairman of Paediatrics Professor S. Attard Montalto.
Provided that permission is granted from UREC and the data protection
office,this involves me observing professionals in their daily interactions
between them and with their patients and families. I may also need to
informally interview participants during the course of observation. Such

Current Folder: **Ethics PhD**

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Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: permission for research study
From: "Torpiano John Gerard"
Date: Fri, October 26, 2012 9:41 am
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Cc: "Attard Montalto Simon"
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Dear Anne

I apologize for taking so long to answer your email.

Although I have nothing against your coming over to observe my patient encounters / interactions, it may be very difficult to do so. At the present time, and for the next several weeks / months, I have quite a large number of medical students with me during some ward-rounds and many of the outpatient sessions.

The outpatient clinic, in particular, has been particularly difficult to run properly because up to 7 - 8 students, the patient, their parents, a trainee family doctor myself and, sometimes, a member of my own staff are squeezed into the room that is slightly larger than a bird-cage. I am finding this situation quite ridiculous and stressful at the same time.

The ward-rounds are similarly well-attended, but there may be more space around the patients' beds to accommodate all these people. On the other hand, a number of patients are showing an understandable degree of discomfort at being observed by a whole herd of health care professionals at any one time.

If you can squeeze in, I will not prohibit you, but there may be problems is all I'm saying.

Best regards.

John

Current Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: [Fwd: permission for research study]
From: "Soler Paul R"
Date: Fri, October 26, 2012 10:17 am
To: "ANNE C CINI" <anne.cini@um.edu.mt>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Dear Anna,
Thank you for your email.
I apologize for the late reply due to my being away for 7 days.
As you have pointed out the question of patient confidentiality must be safeguarded to the fullest extent and prior consent from the patient/carers/guardians obtained before collecting the data.
I would recommend that you seek clearance from the medical ethics committee as this will avoid any dispute at a later stage.
You have my full support to carry out your research work and I wish you every success.
Kindest regards
Dr Paul Soler
Lead Consultant
NPICU

-----Original Message-----
From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: 26 October 2012 10:10
To: Soler Paul R
Subject: [Fwd: permission for research study]

Dear Dr Soler,
I am resending the email below just in case you missed it last week. I need this permit as you may have patients on the mentioned wards.
Regards
Anna

---------- Original Message ----------
Subject: permission for research study
From: "ANNE C CINI" <anne.cini@um.edu.mt>
Date: Thu, October 18, 2012 1:24 pm
To: paul.r.soler
--

Dear Dr Soler,
I am an assistant lecturer at the Faculty of Health Sciences and currently
a PhD student reading for my degree at the Queen Mary University of London, under the supervision of Professor D. Freeth. I would like to conduct a research study regarding Interprofessional Collaboration in

urrent Folder: **Ethics PhD**

Compose Addresses Folders Options Search Help Bookmarks Notes
Anne C Cini | Staff | Sign Out

Message List | Delete Previous | Next Forward | Forward as Attachment | Reply | Reply All

Subject: RE: [Fwd: permission for research study]
From: "Parascandalo Raymond"
Date: Mon, October 29, 2012 11:20 am
To: "ANNE C CINI" <anne.cini@UM.EDU.MT>
Priority: Normal
Options: View Full Header | View Printable Version | Download this as a file

Dear Ms Cini

Kindly accept my apologies for taking long to reply.

I have no objections with regard to your study being carried out as
explained in your email. Permission granted!

Wish you success in your work and studies

Kind regards

Ray

_____

Dr R Parascandalo
Consultant Paediatrician & Senior Clinical Lecturer
Department of Paediatrics

Malta

Tel: ++356 2545 0000
Fax: ++356 2545 4148

-----Original Message-----
From: ANNE C CINI [mailto:anne.cini@um.edu.mt]
Sent: 29 October 2012 09:28
To: Parascandalo Raymond
Subject: [Fwd: permission for research study]

Dear Dr Parascandalo,
I am resending my earlier email just in case you missed the previous
one.
Kind regards,
Anna

---------- Original Message ----------
Subject: permission for research study
From: "ANNE C CINI" <anne.cini@um.edu.mt>
Date: Thu, October 18, 2012 12:20 pm

Appendix 12: Poster announcing the study in the wards

Appendix 13: Clinician's information letter

Date: 13th February, 2014

Dear Participant,

I am a PhD candidate reading for my degree under the supervision of Professor D. Freeth. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting. The study will result in a PhD thesis, conference presentations and peer reviewed papers. Prior to the completion of the study, participating clinical teams can request brief presentations of preliminary findings. Participants can request a summary report at the conclusion of the study.

The study takes an Ethnographic approach and therefore involves marginally participant observation. This means I will observe normal clinical work at various times of the week, but concentrating more on times (such as ward rounds) when interprofessional collaboration is most likely. Although I am an experienced nurse and nursing lecturer, during this study I will be on the ward as a researcher. Any participation in care will be very marginal, for example I would be willing to call a colleague for you if you request this.

During observation I may see something I'd like to clarify during a brief conversation with you. I will be careful not to initiate conversations at inappropriate times, such as when a distraction could place a patient at risk. You are welcome to initiate conversations with me if you wish.

I will make notes while I am on the ward, which will preserve patient confidentiality and so far as possible, preserve the anonymity of staff. If I am writing notes in your presence you may ask to see them at the time. After each period of observation I will type up and expand my notes, in line with ethnographic research processes. The hand-written notes and any other paper documents will be stored in a locked cupboard, to which I am the only key-holder.

Computer files will be password protected and external storage drives will be locked in the cupboard when not in use. Data will be kept and processed in accordance with the data protection act.

If you have any questions about the study please ask when you see me or contact me using the telephone numbers or email address at the end of this letter.

If you do not want me to observe when you are on the ward, please notify me in advance, using the contact details below; or notify the Nursing Officer on duty, who will convey your wishes to me; or simply ask me to leave – you do not have to give a reason.

I will ask a small number of staff to contribute audio-recorded semi-structured interviews, in a quiet place in the hospital, such as a borrowed office. The recording will be used for the sole purpose of the study and your name will not be revealed. The recording will be erased after completion of the study. The audio files and interview transcripts will be password protected and stored securely, as described above in relation to observation data.

The study will also involve looking at documents where different professions communicate with each other. Such documents may include memos that are issued on the notice board or filed, the nurses' daily reports, the diary where nurses take notes during ward rounds, and patients' history files where daily entries of any change in treatment management is made.

Your participation is important in order to evaluate the experiences and perceptions that you might have of collaborative practice in paediatric care. Your participation will be greatly appreciated. Should you wish to opt out of the study, you may do so by informing me verbally, making your wishes known to the Nursing Officer on duty, or contact me through the information given below. You are entirely free to withdraw from the study at any time without giving any reason, or you may decline to answer certain questions without any consequences. The data collected will be coded so that it does not contain your name. Every effort will be made to preserve the confidentiality and anonymity of study participants. Electronic data will be password protected and external computer storage media will be kept in a locked cupboard when not in use. Paper documents will also be stored in a locked cupboard. Any identifiable information necessary during the course of the study (e.g. emails sent and received in relation to data collection) will be stored separately from the research data, on a password protected PC.

Identifiable information will be destroyed when it is no longer needed. Raw data (e.g. observation notes, interview recordings) will be destroyed at the end of the study. Anonymous

processed data will be kept until the completion of peer-reviewed publications. I assure you that I will abide by the regulations of the Data protection act.

The management of the hospital and the Chairman of Paediatrics have given me permission to conduct the study. The ethics committee of the University of Malta has also approved the study. If you consent, please sign the attached form and give it to the ward Nursing Officer.

I would like to thank you in advance for your assistance.

Sincerely,

Anne Cini

I may be contacted at:
Tel. Numbers.: Office: 23401839; Mobile: 99258221.
Email address: anne.cini@um.edu.mt
Or
Professor D. Freeth
Supervisor
Email address: d.freeth@qmul.ac.uk
Or
Dr Roberta Sammut
Local supervisor for ethical issues
Email address: roberta.sammut@um.edu.mt
Tel. Number: Office: 23401831

Appendix 14: Clinicians' Consent Form

I confirm that I have been given enough information regarding this study.

I understand that my participation in the study is voluntary and that I am free to withdraw any time without giving reason during the course of the study without any effect to my clinical and professional responsibilities.

If I am interviewed, I have no objection to the use of the tape recorder, as I know that my identity will not be revealed and that the raw data will not be published.
I have no objection if I am asked to be work-shadowed, that is, having Ms Cini observing me and following me during the course of my work for 2-3 hours.
I agree to participate in the study.

_____	_____	_____
Name of participant	Date	Signature
Ms Anne Cini _____	_____	_____
Researcher	Date	Signature

In case of any questions during the study I may be contacted on:

Tel. Numbers.: Office: 23401839; Mobile: 99258221.
Email address: anne.cini@um.edu.mt

Appendix 15: Consent Form - Parents

I am over 18 years of age.
I have been asked to participate in a research study about Interprofessional Collaboration.

The purpose and details of the study have been explained to me by **Ms Anne Cini** and the Nursing officer. An information letter has also been given to me. Any difficulties which I raised have been adequately clarified. I understand that Ms Cini is an experienced children's nurse and nursing lecturer, although she is on the ward as a researcher.

I give my consent for Ms Cini to observe staff planning and giving care involving my child. Ms Cini will make hand written notes whilst on the ward but will not include my child's name or the names of his/her visitors. I understand that I may withdraw this consent at any time, without giving any reason, by speaking to Ms Cini or one of the staff caring for my child. This will not affect the care of my child.

I understand that Ms Cini may ask my verbal permission for a brief informal conversation about my experiences of collaboration in the children's wards, or may seek further written consent for an audio-recorded interview. I am aware of the inconvenience a conversation or interview might cause. However, I know that I can decline to participate, without giving a reason, and this will not affect the care of my child. I may also change my mind, at any time, and join or leave the study.

I understand that the result of this study may be used for scientific purposes. The results achieved from this study may be reported or published. However, I shall not be personally identified in any way, nor will my child be identified.

I am under no obligation to participate in this study and am doing so voluntarily.
I am not receiving any remuneration for participating in this study.
In case of any questions during the study I may contact Ms Anne Cini on
Tel. Numbers: Office: 23401839; Mobile: 99258221.
Email address: anne.cini@um.edu.mt

_____	_____	_____
Name of participant	Date	Signature
Anne Cini_____	_____	_____
Researcher	Date	Signature

Appendix 16: Consent from for children over 12 years old

I am 12 years of age or over.

I have been asked to participate in a research study about Interprofessional Collaboration (nurses, doctors and other staff working together and with families to provide care for children).

The purpose and details of the study have been explained to me by **Ms Anne Cin**i and the Nursing officer. An information letter has also been given to me. Any questions or worries which I raised have been answered. I know that Ms Cini is a nurse but she won't be looking after me because she is on the ward to do the research study.

I know that I do not have to take part in this study and I can change my mind at any time, without giving a reason – I can just tell Ms Cini or any nurse or doctor, that I have changed my mind. I can also change my mind again later. It will make no difference to my care on the ward if I take part or if I decide not to take part.

I understand that Ms Cini will be observing the staff who look after me and so she wants to observe while they care for me. I give my consent for Ms Cini to observe during my care. I know that Ms Cini will make notes but the notes will not contain my name or other personal information.

Ms Cini may also ask if she can talk to me about how I think staff work together here. This may be a short conversation next to my bed, or an interview in a room on the ward. I understand that I can say no if I feel tired or ill, or I have something more interesting to do.

I understand that if I say yes, I can change my mind later, without giving a reason. I understand that, if I want to, I can ask a friend or a member of my family to sit with me while I talk to Ms Cini

I understand that the result of this study may be written as a book or shorter reports and scientific papers. Ms Cini will also describe her results to other researchers and to hospital staff. However, my name will not be included, nor other private information. I understand that I do not have to take part in this study. I am a volunteer. I am not receiving any money, gifts or special treatment for taking part in this research study.

In case of any questions during the study I may speak to a nurse or contact Ms Anne Cini on:

Tel. Numbers.: Office: 23401839; Mobile: 99258221.

Email address: anne.cini@um.edu.mt

_____	_____	_____
Name of participant	Date	Signature

Anne Cini_____	_____	_____
Researcher	Date	Signature

Appendix 17: Information letter for parents and children

Barts and The London
School of Medicine and Dentistry

Date: 13th February, 2014

Dear Participant,

I am a PhD candidate. I would like to conduct a research study regarding Interprofessional Collaboration in the paediatric setting. You can request a summary report at the conclusion of the study. I will be observing staff during their care of patients at various times of the week. Although I am an experienced nurse and nursing lecturer, during this study I will be on the ward as a researcher. Any participation in care will be very marginal, for example I would be willing to call a colleague for you if you request this.

During observation I may see something I'd like to clarify during a brief conversation with you. I will be careful not to initiate conversations at inappropriate times, such as when a distraction could place a patient at risk. You are welcome to initiate conversations with me if you wish. I will make notes while I am on the ward, which will preserve patient confidentiality and so far as possible, preserve the anonymity of participants. If I am writing notes in your presence you may ask to see them at the time. The hand-written notes and any other paper documents will be stored in a locked cupboard, to which I am the only key-holder. Computer files will be password protected and external storage drives will be locked in the cupboard when not in use. Data will be kept and processed in accordance with the data protection act.

If you have any questions about the study please ask when you see me or contact me using the telephone numbers or email address at the end of this letter. If you do not want me to observe you, please notify me on the day; or notify the Nursing Officer on duty, who will convey your wishes to me; or simply ask me to leave – you do not have to give a reason.

I may ask you to contribute audio-recorded semi-structured interviews, in a quiet place in the ward. The recording will be used for the sole purpose of the study and your name will not be revealed. The recording will be erased after completion of the study. The audio files and interview transcripts will be password protected and stored securely, as described above in relation to observation data. The study will also involve looking at documents where different

professions communicate with each other. Such documents may include patients' history files where daily entries of any change in treatment management are made.

Your participation is important and will be greatly appreciated. I assure you that I will abide by the regulations of the Data Protection Act. The management of the hospital, the Chairman of Paediatrics and the ethics committee of the University of Malta have given me permission to conduct the study

I would like to thank you in advance for your assistance.

Sincerely,

Anne Cini
I may be contacted at:
Tel. Numbers.: Office: 23401839; Mobile: 99258221.
Email address: anne.cini@um.edu.mt

Or

Professor D. Freeth
Supervisor
Email address: d.freeth@qmul.ac.uk

Or

Dr Roberta Sammut
Local supervisor for ethical issues
Email address: roberta.sammut@um.edu.mt
Tel. Number: Office: 23401831

Appendix 18: Confidentiality Agreement for Transcriber

I will be receiving confidential information, in the form of primary data from Anne Cini who is conducting a research project entitled: Interprofessional Collaboration in Paediatrics. In relation to this study, I will be transcribing and translating data derived from interviews carried out with individuals and observations.

I acknowledge that I understand and agree with the following ethical procedures;

I will not disclose the confidential information obtained from Anne Cini to anyone else;

I will keep all data securely stored while it is under my possession;

I will return all the data back to Anne after I finish transcribing.

Recipient of confidential information: Ms Cathy Farrugia

Signature of Cathy Farrugia:

Discloser of Confidential information: Anne Cini

Signature of Anne Cini:

Date: 20th December, 2013

Appendix 19: Sketch of ward-round-book